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SENATE No. 1720

The Commonwealth of Massachusetts

A REPORT

of the

SENATE COMMITTEE ON

POST AUDIT AND OVERSIGHT

Relative to

“LOTTERY REVENUE GROWTH:

PROSPECTS FOR THE FUTURE”

**(Under the provisions of Section 63
of Chapter 3 of the General Laws,
as most recently amended
by Chapter 557 of the Acts of 1986)**

October 31, 1991

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The Commonwealth of Massachusetts

MASSACHUSETTS SENATE

The Honorable William M. Bulger
President of the Senate

**LOTTERY REVENUE GROWTH:
PROSPECTS FOR THE FUTURE**

(Senate 1720)

A REPORT

of the

**SENATE COMMITTEE ON
POST AUDIT AND OVERSIGHT**

Sen. Thomas C. Norton, Chairman

Sen. W. Paul White, Vice-Chairman

Sen. Linda J. Melconian

Sen. Robert A. Havern

Senator Robert D. Wetmore

Senator Christopher M. Lane

Senator Matthew J. Amorello

Prepared by the

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October 1991

The Commonwealth of Massachusetts



The Commonwealth of Massachusetts

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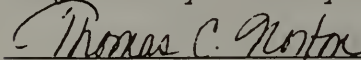
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Clerk of the Senate
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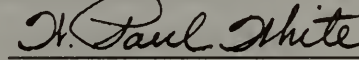
Dear Mr. O'Neill:

Pursuant to M.G.L. Chapter 3, Section 63 as most recently amended by Chapter 557 of the Acts of 1986, the Senate Committee on Post Audit and Oversight respectfully submits to the full Senate the following report:
LOTTERY REVENUE GROWTH: Prospects for the Future.

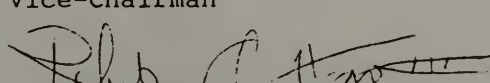
This report is based on research by the Senate Post Audit and Oversight Bureau. It examines the revenue history of the Massachusetts State Lottery, contrasts its performance with other lotteries around the country, and looks at the future of the lottery as a non-tax revenue source.

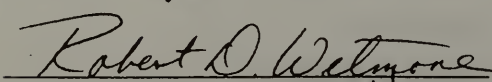
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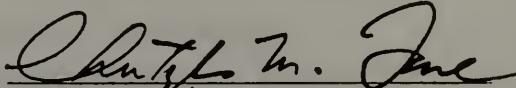

Senator Thomas C. Norton
Chairman

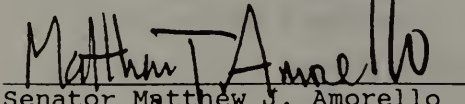

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The Commonwealth of Massachusetts

EXECUTIVE SUMMARY

The Massachusetts State Lottery (MSL) annual sales exceeded \$1 billion since 1985 and \$1.5 billion since 1989. These monies are divided into 1) prize money, 2) operating costs, and 3) net income. Net income, the profit remaining after prizes and expenses are subtracted, is used to partially fund direct local aid payments. In fact, lottery monies represent approximately 13 percent of the total direct local aid paid to Massachusetts cities and towns by the Commonwealth. According to the State Comptroller, lottery revenue is the only local aid funding source to increase each year since 1984.

Although inter-state comparisons show the MSL as one of the most successful operations in the country, recent data indicate that lottery revenue growth in the Commonwealth has slowed and may stagnate, if not decline. This report, by the Senate Committee on Post Audit and Oversight, examines the revenue history of the MSL, compares the MSL to other state lotteries, and looks at the future of the lottery as a non-tax revenue source.

During the course of this revenue review we found that:

- the MSL pays the highest prize allotment in the country.
- although the MSL realizes very high gross sales, it allocates one of the lowest net income (profit) percentages in the country. Its per capita net income (profit) return is, therefore, equal to that of other states with lower revenue production but higher profit ratios.
- the MSL generates less profit per expense dollar than ten other state lotteries.
- the MSL spends 5.1 percent of its gross revenue on operating expenses, one of the lowest operating percentages in the country. When adjusted for inflation, the MSL was one of only four lotteries to decrease expenses from 1985 to 1989. This decrease is partly due to the MSL's reduction in advertising dollars. When viewed as a percentage of total operating costs, advertising has diminished over the past few years.

- the Commonwealth boasts the highest “resident to lottery sales agent” ratio in the country, approximately 960:1 compared to the national average of over 1,100:1.
- while the MSL pays one of the lowest commission rates in the country, the average MSL agent received \$12,000 in commission dollars in 1989.
- although lottery players have increased their spending in many cities and towns across the Commonwealth, the lottery distribution (monies going back to those municipalities) has, in many cases, increased by an even greater percentage.
- whereas the introduction of ‘lotto’ games provided the greatest influx of new revenue, the further introduction of additional lotto games appears to result in a loss in revenue in existing lottery games.
- in recent years, overall MSL revenue growth has declined. In its first six years, the MSL averaged 22.8 percent revenue growth. During the second six year period, the MSL averaged 12.5 percent annual growth. Since 1985, the MSL has averaged less than 10 percent annual revenue growth.
- if the MSL revenue regresses to the national mean the resultant net income decline will translate into reduced local aid payments.

The MSL must now work to either preserve the current flow of revenue or attempt to expand its revenue stream. The former option would entail marketing, to keep the lottery message current, and game/format manipulation. The latter would entail targeting an existing but untapped revenue source, much as the MSL used the Daily Number to divert a portion of the illegal “street number” revenue.

- after review, we feel that the prize structure should not, at this time, be altered as there is no conclusive evidence to show how a prize structure affects sales. However, an adjustment that caused a drop in sales would immediately impact municipal governments through a reduction in local aid.
- the lottery’s net income could be increased by lowering the lottery agent commissions.
- further reducing the advertising budget could prove to be counterproductive.

- the MSL should consider incorporating video game wagering, sports betting, or another segment of the illegal gambling revenue stream into its portfolio.

Various community leaders have petitioned for the development of local municipal lotteries based upon the apparent disparity of the amount of lottery money wagered in each community versus the subsequent local aid distribution. As lottery sales are often linked to public perception, the MSL should not ignore the sentiment behind the perceived inequity.

- the MSL should investigate incorporating regional or municipal sales figures into the lottery distribution formula.
- the MSL should investigate developing a regional lottery game, restricting game sales within certain boundaries and dedicating subsequent net income to the communities within the sales region.

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INTRODUCTION

In fiscal 1983, the eighteen jurisdictions operating public lotteries across the country grossed \$5.5 billion, collectively. Seven years later 32 jurisdictions were running public lotteries with a combined annual gross of \$20 billion. Public lotteries now represent one of the few revenue streams that have experienced consistent positive growth over the past ten years.

In many ways, the revenue history of the Commonwealth of Massachusetts can be viewed as a microcosm of the rest of the country. From 1984 through 1989 most of the Commonwealth's revenue sources declined. Tax receipts, inter-governmental (federal) support, and agency revenues all dropped as a percentage of the Commonwealth's total annual revenue. Only lottery revenues increased during this period, rising from 1.3 percent of the Commonwealth's total annual revenue in 1984 to 10.4 percent in 1989.¹

According to the nationally recognized consulting firm of Laventhol & Horwath, the Massachusetts State Lottery (MSL) has experienced positive revenue growth during 18 of its 19 year history. Gross lottery revenues have exceeded \$1 billion for each of the last five years.

This report, by the Senate Committee on Post Audit and Oversight, examines the revenue history of the MSL, compares the MSL to other state lotteries, and looks at the future of the lottery as a non-tax revenue source.

The Massachusetts State Lottery

Chapter 813 was enacted on September 27, 1971 to provide "additional revenue for the commonwealth by the establishment of a state lottery." This legislation also created the Local Aid Fund, which comprised "revenues received from the sale of lottery tickets" to be used "solely for state assistance to cities and towns."

The enabling legislation apportioned lottery revenue three ways: a) not less than 45 percent for prize money, b) not more than 15 percent for the operation and administration of the lottery, c) the remaining balance (net income) for the Local Aid Fund.

¹ "A Review of the Retention and Collection of Non-Tax Revenue by Commonwealth Agencies." October 1990, State Comptroller's Office. p. VIII-1.

The MSL sold \$70.5 million worth of lottery tickets in fiscal 1973, its first full year of operation. In 1990, MSL revenue exceeded \$1.5 billion for the second consecutive year.

PART I: INTER-STATE LOTTERY PERFORMANCE

Inter-state lottery performance comparisons often result in disparate conclusions. State to state variations in game formats, methods of promotion, and per capita personal income can skew results. No state operates in a vacuum, however. Inter-state comparisons are helpful in measuring long-term trends and methods of operation.

We used three comparative indices to measure inter-state lottery performance: 1) gross lottery revenue receipts, 2) per capita lottery revenue receipts, and 3) per capita net income. Gross revenue receipts measure the total amount of revenue generated by a state lottery in one year. This measure provides an overview of total activity, but does not allow for state population differences. The per capita revenue receipt measurement is used to neutralize population inequities by determining how much revenue is generated per resident of each state. Combined, the two indices allow an inter-state measure of revenue production.

Finally, a lottery's "profit", the amount remaining after prize money and operating costs have been subtracted, is called "net income." The per capita net income measurement, therefore, examines the amount of profit that each lottery generates per resident. Lottery net income is subsequently returned to the taxpayers in the form of state services or assistance.

GROSS REVENUE

In recent years California, New York, Massachusetts, Pennsylvania and Illinois generated the greatest amount of lottery revenue in the country (see **Chart 1: "Inter-State Gross Revenue Receipts"**). These five states have each generated annual lottery receipts in excess of \$1 billion since fiscal year 1985.

In spite of having one of the smaller population bases of the states listed above, the Commonwealth of Massachusetts regularly outsells all but the New York and California State Lotteries. California and

INTER-STATE GROSS REVENUE						
<i>(in thousands)</i>						
Fiscal Year	1985	1986	1987	1988	1989	1990*
California		\$1,781,881	\$1,406,153	\$2,125,003	\$2,663,650	\$2,480,000
New York	\$1,299,119	\$1,357,662	\$1,511,464	\$1,632,008	\$1,925,036	\$2,058,000
Florida				\$659,531	\$1,832,028	
Pennsylvania	\$1,336,522	\$1,320,000	\$1,338,523	\$1,461,051	\$1,591,222	\$1,540,000
Massachusetts	\$1,235,269	\$1,403,954	\$1,259,908	\$1,379,324	\$1,549,777	\$1,568,000
Illinois	\$1,207,595	\$1,287,092	\$1,306,169	\$1,303,815	\$1,530,501	\$1,571,000
Ohio	\$855,564	\$942,748	\$1,070,951	\$1,074,715	\$1,474,452	\$1,650,000
New Jersey	\$936,093	\$1,003,296	\$1,129,338	\$1,190,780	\$1,264,355	\$1,223,000
Michigan	\$891,244	\$1,023,688	\$1,042,013	\$1,246,445	\$1,201,883	\$1,198,000
Maryland	\$681,067	\$718,300	\$760,678	\$811,345	\$746,326	\$811,500
Connecticut	\$344,458	\$429,112	\$489,284	\$513,870	\$494,524	\$525,000
Virginia					\$415,178	\$475,000
Washington	\$149,954	\$181,725	\$194,497	\$215,718	\$256,481	\$246,300
Arizona	\$72,916	\$120,997	\$142,281	\$172,765	\$252,258	\$287,900
Wisconsin					\$234,724	\$309,800
Missouri		\$209,094	\$179,993	\$152,476	\$201,127	\$222,000
Iowa		\$82,548	\$95,193	\$129,668	\$173,529	\$169,500
Oregon	\$42,490	\$88,657	\$101,111	\$161,539	\$157,166	\$162,600
Wash. DC	\$112,792	\$119,902	\$123,136	\$124,484	\$145,657	\$149,200
Kentucky					\$126,052	\$197,700
Maine	\$15,946	\$38,850	\$58,265	\$83,288	\$96,703	\$98,400
New Hamp.	\$15,242	\$34,317	\$58,709	\$76,992	\$87,158	\$94,500
Colorado	\$109,500	\$111,300	\$115,800	\$93,300	\$80,594	\$140,100
Kansas				\$66,239	\$68,768	\$63,500
Delaware	\$38,750	\$41,090	\$45,937	\$55,608	\$64,143	\$66,400
Rhode Island	\$53,246	\$57,920	\$58,829	\$62,347	\$62,284	
W. Virginia		\$53,448	\$68,304	\$57,794	\$60,557	\$67,000
Vermont	\$5,231	\$12,478	\$25,472	\$35,247	\$39,556	\$42,900
S. Dakota				\$26,387	\$21,430	\$65,100
Montana				\$21,793	\$11,648	\$21,500
Indiana						\$375,000
Idaho						\$65,900
* 1990 data are estimated.						
SOURCE: Saul Leonard Co., Public Gaming International.						

Chart 1

New York owe their lottery success to, among other things, population totals which rank number one and two in the country, respectively. When measured by per capita revenue, however, California and New York rank close to, or below, the national mean.

Many state lottery operations experienced great revenue growth throughout the late 1980s. The Ohio State Lottery gross revenue increased by 93 percent from 1985 through 1990, while New

Hampshire revenues increased over five fold and Vermont revenues increased over eight fold. (The MSL gross revenue increased by 25 percent from 1985 through 1990.) During this period the State of Florida experienced the greatest single year growth when, from 1988 to 1989, lottery revenue almost tripled.

Not all lotteries generated positive revenue growth, however. The Colorado State Lottery experienced a 26 percent decline from 1985 to 1989 before rebounding in 1990. Montana recorded the largest single year revenue decrease, falling 47 percent from 1988 to 1989. Fourteen of the thirty states operating lotteries after 1985 experienced at least one year of declining revenue, however only two operations recorded two consecutive years of declining revenue (Missouri: 1987, 1988; Michigan: 1989, 1990).

PER CAPITA REVENUE

When viewed in terms of per capita revenue (revenue generated per resident) Massachusetts, Washington D.C. Maryland, Illinois, and New York compose the top five revenue producing states (see **Chart 2: "Inter-State Per Capita Revenue"**). Massachusetts is the only state to rank within the top five in both (gross and per capita) revenue categories.

Massachusetts, ranking eleventh in state population, has led the nation in per capita lottery revenue since 1985, generating more than 2.5 times the national average in 1985, and almost three times the national average in 1986 and 1987. In fact, although Massachusetts is barely one-third the size of New York in population, its citizens buy more lottery tickets than those in New York by a ratio of more than 2:1. California, the other top revenue grossing lottery in the country, has consistently generated per capita revenue below the national average since its inception in 1986.

Studies have shown that gambling is a regional and cultural activity. The Commission on the Review of the National Policy Toward Gambling found that 80 percent of persons living in northern states gambled in the mid-1970s, as opposed to 40 percent of those living in Southern states. Illegal gambling was found to be "three times more prevalent in the Northeast than in the South."²

² *Second Interim Report* of the Commission on the Review of the National Policy Toward Gambling, July, 1976, p. 40.

INTER-STATE PER CAPITA REVENUE

Fiscal Year	1985	1986	1987	1988	1989	1990*
<i>Massachusetts</i>	\$212.17	\$240.10	\$260.10	\$201.21	\$265.68	\$273.31
<i>Wash. DC</i>	\$179.77	\$189.54	\$194.45	\$200.13	\$222.88	\$233.73
<i>Maryland</i>	\$156.60	\$163.55	\$170.40	\$178.90	\$171.57	\$192.44
<i>Illinois</i>	\$104.91	\$114.36	\$112.86	\$112.57	\$168.46	\$137.49
<i>New Jersey</i>	\$123.03	\$130.94	\$146.58	\$115.21	\$166.05	\$166.06
<i>Connecticut</i>	\$109.21	\$135.20	\$153.43	\$160.03	\$154.54	\$168.94
<i>Pennsylvania</i>	\$108.79	\$111.36	\$112.58	\$122.40	\$131.69	\$129.81
<i>Ohio</i>	\$79.49	\$87.49	\$99.36	\$99.65	\$131.54	\$152.81
<i>Florida</i>				\$54.85	\$131.52	
<i>Michigan</i>	\$97.58	\$109.97	\$110.04	\$135.48	\$127.24	\$129.34
<i>New York</i>	\$71.68	\$74.06	\$82.09	\$91.55	\$104.95	\$117.21
<i>Delaware</i>	\$62.74	\$65.78	\$72.33	\$86.34	\$102.19	\$111.72
<i>California</i>		\$66.97	\$51.60	\$76.81	\$91.28	\$104.78
<i>New Hampshire</i>	\$15.49	\$33.86	\$55.81	\$72.84	\$87.36	\$102.65
<i>Maine</i>	\$13.79	\$33.29	\$49.48	\$70.16	\$83.03	\$87.49
<i>Vermont</i>	\$9.81	\$23.19	\$46.80	\$64.31	\$72.97	\$83.88
<i>Virginia</i>					\$72.15	\$88.84
<i>Arizona</i>	\$23.87	\$37.95	\$43.35	\$51.02	\$63.80	\$105.92
<i>Rhode Island</i>	\$54.33	\$58.76	\$59.41	\$63.23	\$63.58	
<i>Iowa</i>		\$28.33	\$33.15	\$45.75	\$59.27	\$58.17
<i>Washington</i>	\$15.80	\$32.54	\$43.45	\$47.53	\$58.58	\$59.61
<i>Oregon</i>			\$37.16	\$59.30	\$58.03	\$61.78
<i>Wisconsin</i>		\$41.16			\$47.99	\$65.83
<i>Missouri</i>			\$34.36	\$29.87	\$39.84	\$45.15
<i>Kentucky</i>		\$27.36			\$33.68	\$54.00
<i>W. Virginia</i>			\$34.73	\$30.46	\$30.35	\$34.37
<i>S. Dakota</i>				\$37.21	\$29.61	\$94.24
<i>Kansas</i>				\$26.73	\$27.95	\$26.86
<i>Colorado</i>	\$34.46	\$34.45	\$34.68	\$28.30	\$24.06	\$48.48
<i>Montana</i>				\$26.93	\$14.03	\$27.33
<i>Idaho</i>						\$69.81
<i>Indiana</i>						\$68.30
MEAN	\$79.36	\$81.80	\$88.62	\$84.77	\$94.53	

* 1990 data are estimated.

SOURCE: Saul Leonard Co., Public Gaming International.

Chart 2

Statistics show that, when ranked in the order of preference, gambling on a state lottery ranks behind casino gambling, horse racing, cards, poker machines, and sports gambling. After casino gambling and poker machines, men prefer lottery gambling while women prefer lottery gambling behind only bingo games.³

³ Valerie C. Lorenz, Ph.D. "State Lotteries and Compulsive Gambling," *Journal of Gambling Studies*, Winter 1990, page 387.

East coast state lotteries tend to generate more gross and per capita revenue than their Central or Western counterparts. Eight of the twelve top gross lottery revenue states are located in the East, while nine of the twelve top per capita lottery revenue states are in the East. With few exceptions, most of the more successful state lotteries have been in existence for at least five years prior to 1989. All but one of the state lotteries generating gross revenue above the national average began operating before 1985. Conversely, 80 percent of the state lotteries generating per capita revenue below the national average began after 1985.

NET INCOME

Contrary to the underlying message of most lottery marketing strategies, state lotteries were not developed to increase the number of resident millionaires. The MSL “net income”, (the balance remaining after prize money and operating expenses are subtracted), provides local aid and arts council assistance to Massachusetts municipal governments (see **Appendix A: “Dollars Wagered vs. Dollars Distributed: FY86-FY90”**). In fact, lottery monies compose approximately 13 percent of the total amount paid in direct local aid by the Commonwealth.

Lottery net income is used to fund a variety of services across the country. The New York, New Hampshire, Florida, and Montana State Lotteries all dedicate lottery net income to education. Arizona uses its lottery income for transportation; Oregon and Iowa for economic development; Pennsylvania for senior citizen programs; Colorado for construction and conservation.

The percentage allocated to net income (profit) differs from state to state (see **Chart 3: “Inter-State Net Income”**), from as little as 20 percent of gross revenue (Montana: 1990) to as much as 46.2 percent (New York: 1985). The Maryland, Connecticut and New York State Lotteries allow the highest net income percentage in the country. The Massachusetts State Lottery dedicates one of the lowest percentages of gross revenue to net income in the country.

In fiscal 1985, the MSL dedicated 31.6 percent of gross revenue toward net income, a figure 12 percent below the national mean. In fiscal 1989, the MSL’s net income was 16 percent below the national mean, and only amounted to 30.2 percent of gross sales.

INTER-STATE NET INCOME

(% of revenue)

Fiscal Year	1985	1986	1987	1988	1989	1990*
<i>Maryland</i>	38.7	45.1	43.8	42.4	44.7	43.7
<i>Connecticut</i>	43.2	44.6	43.8	43.8	44.4	43.4
<i>New York</i>	46.2	44.8	44.1	43.3	43.1	45.0
<i>New Jersey</i>	41.7	41.7	41.9	42.2	42.1	42.8
<i>Washington</i>	35.2	40.2	40.6	38.1	41.4	37.8
<i>Pennsylvania</i>	46.5	40.8	42.6	40.6	41.0	42.6
<i>Michigan</i>	40.3	40.5	39.1	39.2	40.3	39.0
<i>Florida</i>				36.0	39.5	38.0
<i>Ohio</i>	39.5	40.6	34.9	35.0	39.0	39.0
<i>Arizona</i>	31.1	35.0	36.3	38.4	38.6	39.1
<i>Illinois</i>	42.7	42.0	41.6	37.4	38.5	40.5
<i>California</i>		39.0	35.8	37.7	38.5	34.0
<i>Wisconsin</i>					38.3	36.8
<i>Rhode Island</i>	34.9	37.2	36.6	35.3	38.1	
<i>Kentucky</i>					37.3	35.0
<i>Delaware</i>	38.8	40.7	37.1	36.9	37.1	37.7
<i>Wash. DC</i>	28.4	29.9	28.5	34.5	36.6	33.9
<i>Virginia</i>					35.4	30.9
<i>New Hampshire</i>	28.2	31.3	35.2	36.3	34.8	34.9
<i>S. Dakota</i>				33.8	34.4	23.7
<i>Missouri</i>		38.8	37.1	38.1	33.3	32.0
<i>Oregon</i>	34.1	30.0	31.8	34.1	32.6	34.0
<i>W. Virginia</i>		39.3	37.2	27.0	32.0	45.0
<i>Vermont</i>	23.6	26.7	31.4	31.1	31.8	30.9
<i>Maine</i>	27.5	30.5	31.2	32.7	31.5	31.8
<i>Massachusetts</i>	31.6	31.3	30.7	31.5	30.2	30.2
<i>Iowa</i>		31.4	28.4	31.1	29.5	29.0
<i>Montana</i>				34.3	25.0	20.0
<i>Kansas</i>				30.0	21.8	30.0
<i>Colorado</i>	30.2	25.6	31.7	28.3	21.8	29.2
<i>Idaho</i>						26.5
<i>Minnesota</i>						31.0
<i>Indiana</i>						35.0
MEAN	35.9	36.8	36.6	35.9	35.8	

* 1990 data are estimated.

Source: Saul Leonard Co., Public Gaming International.

Chart 3

Annual lottery payments to Massachusetts cities and towns range from over \$10 million (Springfield, Worcester, Fall River, New Bedford), to less than \$25,000 (Alford, Edgartown, Middlefield, Mount Washington) (see Appendix A). During the period dating fiscal 1986-1990, the City of Boston received the largest annual lottery return (\$25 million: FY89 & FY90); the Town of Gosnold received the smallest annual return (\$90.00: FY87.)

The distribution of MSL net income has been questioned by municipal leaders at various times during the past few years. Lottery sales increased dramatically in many locations around the state causing many municipal managers to view those dollars as a potential local revenue stream.

From 1986 through 1990, lottery sales increased in the City of Quincy by 51 percent, by 84 percent in the City of Brockton, and by 50 percent in the City of New Bedford. Combined, these three municipalities spent over \$105 million on the lottery in 1990 (see **Appendix A**).

However, just as dollars going into the lottery increased from 1986 through 1990, lottery dollars going back to the cities and towns also increased during the same period. While Quincy's lottery distribution increased by 65 percent from 1986 through 1990, Brockton's lottery distribution increased by 74 percent, and the city of New Bedford's lottery distribution increased by 85 percent.

The lottery distribution formula factors a municipality's population base with its assessed real estate value. The formula, therefore, is skewed toward urban communities having a large population base and a low real estate assessment. The formula, however, returns but a portion of the total amount wagered in each community. Whereas Quincy, Brockton, and New Bedford combined to wager over \$105 million in 1990, their combined lottery distribution equalled less than \$25 million. This apparent disparity has, in recent years, led to calls from municipal leaders in Quincy, Brockton, and New Bedford for local municipal lotteries. However, as any local lottery would directly compete with the state lottery, it is unlikely that state approval for municipal lotteries would be easily obtained.

AN INTER-STATE ANALYSIS

Although the Massachusetts State Lottery generates an extraordinary amount of lottery revenue, other states with lower gross revenue dollars provide almost identical net income (profit) returns (see **Chart 4: "Inter-State Per Capita Net Income"**). For example, in 1990 the MSL generated \$1.5 billion in gross revenue while the Maryland Lottery generated \$811 million in gross revenue. Maryland provided more per capita net income, however, than the Commonwealth, generating \$84.09 per resident, as opposed to the MSL's \$82.50. This

INTER-STATE PER CAPITA NET INCOME

Fiscal Year	1985	1986	1987	1988	1989	1990*
Wash. DC	\$51.27	\$57.29	\$55.98	\$68.96	\$83.34	\$79.24
Massachusetts	\$67.31	\$75.54	\$80.18	\$69.43	\$80.78	\$82.54
Maryland	\$60.63	\$73.72	\$74.69	\$75.94	\$76.77	\$84.09
New Jersey	\$52.01	\$55.31	\$62.03	\$65.46	\$70.87	\$71.07
Connecticut	\$47.18	\$60.13	\$67.14	\$70.07	\$68.64	\$73.32
Illinois	\$44.89	\$47.84	\$46.99	\$42.09	\$65.04	\$55.68
Pennsylvania	\$52.20	\$45.49	\$47.96	\$49.67	\$54.85	\$55.30
Ohio	\$31.37	\$35.70	\$34.77	\$34.85	\$53.54	\$59.60
Michigan	\$39.60	\$45.67	\$44.51	\$53.09	\$53.38	\$50.44
Florida				\$19.72	\$52.46	
New York	\$33.83	\$34.18	\$37.52	\$39.65	\$47.17	\$52.74
Delaware	\$24.50	\$26.83	\$26.94	\$31.83	\$38.34	\$42.12
California		\$26.27	\$18.68	\$28.93	\$35.63	\$35.63
New Hampshire	\$4.41	\$10.77	\$20.13	\$26.46	\$30.97	\$35.52
Maine	\$3.79	\$10.18	\$15.51	\$22.97	\$26.21	\$27.82
Virginia					\$25.94	\$27.45
Rhode Island	\$19.31	\$22.26	\$22.07	\$32.23	\$24.71	
Arizona	\$7.42	\$13.26	\$15.72	\$19.59	\$24.64	\$41.31
Washington	\$12.13	\$16.57	\$17.70	\$18.13	\$24.34	\$22.53
Vermont	\$2.33	\$6.25	\$14.77	\$19.97	\$23.00	\$25.92
Oregon	\$5.42	\$9.88	\$11.91	\$20.21	\$19.22	\$21.00
Wisconsin					\$18.74	\$24.23
Iowa		\$8.98	\$9.49	\$14.21	\$17.58	\$16.87
Missouri		\$16.12	\$13.17	\$11.38	\$13.41	\$14.45
Kentucky					\$12.71	\$18.90
S. Dakota				\$12.58	\$10.38	\$22.34
W. Virginia		\$10.85	\$13.23	\$8.21	\$9.95	\$15.46
Kansas				\$7.90	\$6.15	\$8.06
Colorado	\$10.42	\$8.79	\$11.23	\$8.00	\$5.37	\$14.16
Montana				\$9.24	\$3.51	\$5.47
Idaho						\$18.50
Indiana						\$23.91
MEAN	\$30.00	\$31.21	\$33.14	\$32.40	\$35.92	

* 1990 data are estimated.

SOURCE: Saul Leonard Co., Public Gaming International.

Chart 4

indicates that, while the MSL is more "successful" in terms of overall dollars generated the Maryland lottery is more "successful" in proportional terms of dollars generated for government programs.

We did not find a relationship between a state lottery's revenue gross and that state's per capita net income return. In 1989 the California State Lottery generated more gross revenue than any other state lottery yet yielded less per capita net income than the national average.

In the same year, New York, conducting the second highest grossing lottery in the country, produced less per capita net income than ten other states.

To further illustrate this point, in fiscal year 1989, the Washington D.C. and Maryland State Lotteries generated gross revenue in the amount of \$ 145 million and \$746 million, respectively, and per capita net income in the amount of \$83.34 and \$76.77, respectively. During the same period, the Massachusetts State Lottery generated \$1.5 billion in gross revenue and produced \$80.78 in per capita net income. While Washington D.C. and Maryland generated 91 percent and 52 percent less gross revenue, respectively, than the Commonwealth, Maryland produced only 5 percent less per capita net income than the Commonwealth, while Washington D.C. generated 3.1 percent more per capita net income than the Commonwealth.

The data indicate that the MSL is highly dependent upon per capita lottery spending. Should current player involvement decline, overall lottery revenue will be dramatically and adversely affected. As the Massachusetts State Lottery dedicates a relatively small percentage of revenue to net income, any reduction in gross revenue will translate into a reduction in local assistance to municipal governments across the Commonwealth; a reduction that, in the present atmosphere of political and economic austerity, the state would be hard-pressed to make up elsewhere in the budget.

PART II: LOTTERY EXPENSES

Lottery operations have three basic expense categories: a) prize money, which can absorb anywhere from 43 to 60 percent of gross revenue, b) agent compensation, which compose sales commission payments and bonus payments, and c) general operating expenses, which can include employee salaries, advertising costs, computer network costs, rental costs, office supplies, and printing expenses.

This section examines the percentage of revenue that each state lottery across the country dedicated to the three expense categories over the past five years. We conclude the section by contrasting each lottery's net income with its general operating expenses. This defines the profit which each lottery generated per expense dollar.

A) PRIZE MONEY

The MSL allocates the highest percentage of gross revenue to prize money in the country (see Chart 5: "Inter-State Prize Allocation"). In fiscal 1990 almost 60 percent of all MSL lottery revenue was allocated to prize money. The Vermont State Lottery followed Massachusetts with a 55 percent prize allocation, while West Virginia allocated 40 percent, the lowest prize percentage in the country.

INTER-STATE PRIZE ALLOCATION						
(% of revenue)						
Fiscal Year	1985	1986	1987	1988	1989	1990*
Massachusetts	59.0	59.0	60.0	59.1	59.7	59.7
Vermont	49.9	49.9	54.0	55.0	55.1	55.0
Iowa		47.1	49.7	50.7	53.3	53.0
Delaware	50.0	48.0	52.1	52.5	52.1	52.1
Illinois	48.7	49.1	49.5	53.0	51.8	51.0
Oregon	50.7	51.5	50.4	50.4	51.2	50.0
Maine	49.6	51.7	52.0	49.6	51.1	52.4
Wisconsin					50.8	
New Hampshire	48.2	48.3	48.1	49.5	50.8	50.2
Kentucky					50.6	50.0
Colorado	52.1	55.4	49.4	50.3	50.1	51.6
Pennsylvania	45.2	50.2	48.0	50.6	50.1	48.0
Missouri		46.0	43.6	44.5	49.8	50.0
Virginia					49.6	55.0
California		49.7	49.3	49.3	49.3	50.0
New Jersey	49.2	49.5	49.3	49.1	49.2	50.0
Connecticut	51.9	50.7	51.3	51.4	49.2	52.1
Kansas				45.5	49.1	45.0
Florida				50.1	49.1	50.0
Arizona	45.9	45.6	44.6	45.8	47.5	47.5
Ohio	49.7	49.2	53.2	52.9	47.1	49.2
Maryland	53.6	47.0	47.9	49.4	47.0	48.2
Rhode Island	48.6	46.3	47.4	49.2	46.4	
Wash. DC	51.3	49.3	50.1	48.9	46.0	48.8
Washington	47.1	45.5	45.3	47.6	45.9	47.4
Montana				45.0	45.5	47.0
New York	43.1	44.1	44.6	45.0	45.5	
S. Dakota				44.6	45.0	48.0
Michigan	47.9	47.0	47.5	47.1	44.9	46.0
W. Virginia		49.1	43.9	45.9	43.8	40.0
Indiana						50.0
Idaho						50.0
Minnesota						53.0
MEAN	49.6	49.1	49.2	49.3	49.2	

* 1990 data are estimated.

SOURCE: Saul Leonard Co., Public Gaming International.

Chart 5

While the Commonwealth has, over the past years, kept its prize money allocation fairly constant, other states have adjusted their ratio. Pennsylvania increased its prize share from 45.2 percent of gross revenue in fiscal 1985 to 50.2 in fiscal 1986. Maryland *decreased* its prize allocation from 53.6 percent in fiscal 1985 to 47 percent in fiscal 1986. Colorado *decreased* its allocation from 55.4 percent in fiscal 1986 to 49.4 percent in fiscal 1987.

The data reviewed for this study do not establish a relationship between the amount allocated to prize money and the gross revenue generated by a state lottery. When Pennsylvania hiked its prize percentage by 11 percent in 1986, total lottery revenue actually *declined* by 1.2 percent. In contrast, when (in the same year) Maryland *decreased* its prize share by 12 percent, total lottery revenue *increased* by 5.5 percent. During this year, the Maryland State Lottery ranked seventeenth in the nation in the percentage of revenue devoted to prize money yet third in per capita revenue generated. Likewise, when Colorado dropped its prize share by 12 percent in 1987, total lottery revenue increased by 4 percent. One year later, when Colorado increased its prize allocation by 2 percent, gross revenue *decreased* by 19 percent.

The MSL's practice of allocating one of the highest percentage of gross revenue to prize money almost guarantees that its net income percentage will be correspondingly lower than other lotteries. The MSL argues, however, that gross sales are driven by the prize percentage; that a lower prize percentage would result in lower sales which would result in reduced net income dollars.

Although the MSL dedicates 59+ percent of gross revenue to prize money overall, the prize percentage varies from game to game. The lotto games (MegaBucks, Mass Millions) operate with a prize payout of between 50-60 percent of gross revenue. The Daily Number utilizes a 60 percent prize payout structure, while the Instant Games operate with a 65+ percent prize structure.

Throughout the lottery's history, the revenue apportionment (the "take-out") has been questioned. Change proponents argue that a decrease in the prize percentage would translate into an increase in the net income (profit) percentage. The State Lottery has long countered that a decrease in the prize percentage would result in lower sales. As evidence that sales are driven by the prize percentage lottery officials point to the Instant Games which experienced rapid revenue

growth beginning in 1984, one year after the prize percentage was increased. The data reviewed for this study do not conclusively define the relationship between a lottery's prize structure and subsequent lottery sales.

B) AGENT EXPENSES

Public lotteries represent one of the more successful "public-private partnerships" across the country. State lotteries rely upon a network of private vendors to sell tickets. This "privatized" distribution network often ends up composing the single largest operating expense.

There are currently 137,000 lottery retailers in the United States.⁴ The Commonwealth lists the highest per capita lottery agent ratio in the country, 960:1, whereas most lottery states have a resident to agent ratio of 1,100:1.

As an inducement for selling lottery tickets, retailers receive a commission equal to a certain percentage of their total lottery sales. The MSL and the Vermont State Lottery paid agent commissions equal to 5 percent of total sales from 1985 through 1989. According to information reviewed for this study, no other state lottery maintained the same commission rate during this period (see **Chart 6: "Agent Commissions"**). In fact, the State of Rhode Island decreased its commission rate from 12.1 percent of total sales in 1985 to 7.2 percent of sales in 1989. All told, twelve state lotteries decreased their agent commission rates during this period, while eight state lotteries increased their agent commission rates.

Bonus payments are made to lottery agents as an inducement for sales agents to pay smaller prize claims. According to the MSL, 84 percent of all prize claims are processed by lottery agents. The MSL agent bonus payment rate equals 1 percent (up to \$15,000) of a winning ticket's face value. (Mass Millions bonus payments cannot exceed \$25,000.)

While the MSL currently pays one of the lowest agent commission rates in the country, in 1989 the average annual MSL agent commission totaled over \$12,000. When combined, agent commissions and agent bonus payments constitute 60 percent of the MSL total operating expenses (see **Appendix B: "MSL Expenses"**).

⁴ "Lottery Update," *Public Gaming International*, January 1990, p. 12-13.

AGENT COMMISSIONS

(% of revenue)

Fiscal Year	1985	1986	1987	1988	1989	(Agents per Capita)
Michigan	6.7	6.7	6.6	6.5	8.3	1058
Rhode Island	12.1	12.2	11.5	7.2	7.2	906
Maine	11.2	6.6	6.5	6.6	6.9	741
Illinois	6.7	6.5	6.3	5.1	6.4	1219
Arizona	6.2	6.0	6.1	6.0	6.0	1485
Colorado	5.8	5.8	5.9	5.8	5.9	1211
Montana				5.6	5.8	952
New York	6.1	5.9	5.8	5.8	5.8	1826
S.Dakota				4.9	5.8	615
Iowa		5.5	12.1	5.5	5.7	743
Missouri		5.5	5.7	5.8	5.7	1246
New Jersey	7.0	7.0	7.0	5.3	5.4	1535
New Hampshire	4.5	4.9	5.2	5.2	5.4	812
Kansas				5.4	5.2	1031
Florida				5.4	5.2	1021
W. Virginia				5.4	5.2	1183
Ohio	5.5	5.5	5.5	5.5	5.1	1352
Maryland	4.0	5.1	5.1	5.1	5.1	2146
Pennsylvania	6.5	6.5	6.7	5.1	5.1	1363
Kentucky					5.1	1006
California		5.0	5.0	5.0	5.1	1416
Vermont	5.0	5.0	5.0	5.0	5.0	701
Washington	5.3	5.1	5.1	5.0	5.0	1336
Virginia					5.0	1095
Delaware	8.4	8.3	7.9	5.0	5.0	1306
Wash. DC	5.4	5.3	5.3	5.3	5.0	1075
Massachusetts	5.0	5.0	5.0	5.0	5.0	960
Oregon	5.0	4.9	4.8	4.7	4.9	756
Wisconsin					4.9	961
Connecticut						845
MEAN	6.4	6.1	6.3	5.5	5.6	1130

SOURCE: Saul Leonard Co., Public Gaming International.

Chart 6

C) GENERAL OPERATING EXPENSES

General operating expenses include employee salaries, printing costs, computer costs, office supplies, and advertising. Lotteries have spent anywhere from 23 percent of gross revenue on annual operating expenses (Kansas, Montana: 1989) to less than 2 percent (Pennsylvania, Illinois: 1985; New Jersey: 1986, 1987) (see Chart 7: "Lottery Expenses").

LOTTERY EXPENSES

(% of revenue)

Fiscal Year	1985	1986	1987	1988	1989
<i>Kansas</i>				19.1	23.9
<i>Montana</i>				15.1	23.7
<i>Colorado</i>	11.9	13.2	13.0	15.6	22.2
<i>W. Virginia</i>		11.6	18.9	21.7	19.0
<i>S. Dakota</i>				16.7	14.8
<i>Wash DC</i>	14.9	15.5	16.1	11.3	12.4
<i>Iowa</i>		16.0	9.8	12.7	11.5
<i>Oregon</i>	10.2	13.6	13.0	10.8	11.3
<i>Missouri</i>		9.7	13.6	11.6	11.2
<i>Maine</i>	11.7	11.2	10.3	11.1	10.5
<i>Virginia</i>					10.0
<i>New Hampshire</i>	19.1	15.5	11.5	9.0	9.0
<i>Ohio</i>	5.3	4.7	6.4	6.6	8.8
<i>Rhode Island</i>	4.4	4.3	4.5	8.3	8.3
<i>Vermont</i>	21.5	18.4	9.6	8.9	8.1
<i>Arizona</i>	16.8	13.4	13.0	9.8	7.9
<i>Washington</i>	12.4	9.2	9.0	9.3	7.7
<i>California</i>		6.3	9.9	8.0	7.1
<i>Kentucky</i>					7.0
<i>Michigan</i>	5.1	5.8	6.8	7.2	6.5
<i>Connecticut</i>	4.9	4.7	4.9	4.8	6.4
<i>Florida</i>				8.5	6.2
<i>Wisconsin</i>					6.0
<i>Delaware</i>	2.8	3.0	2.9	5.6	5.8
<i>New York</i>	4.6	5.2	5.5	5.9	5.6
<i>Massachusetts</i>	5.5	5.7	5.2	4.4	5.1
<i>Pennsylvania</i>	1.8	2.5	2.7	3.7	3.8
<i>Illinois</i>	1.9	2.4	2.6	4.5	3.3
<i>New Jersey</i>	2.1	1.8	1.8	3.4	3.3
<i>Maryland</i>	3.7	2.8	3.2	3.1	3.2
MEAN	8.5	8.5	8.4	9.5	9.7

NOTE: Not including commissions.

SOURCE: Saul Leonard Co.

Chart 7

The MSL spends 5.1 percent of its gross revenue on lottery operating expenses, less than all but four other state lotteries in the country. This percentage is masked, however, by the extraordinary gross revenue that the MSL generates. If the MSL revenue dropped to a level of revenue closer to the national average, its present operating costs would equal a far greater percentage of revenue.

The MSL operating cost percentage remained relatively stable when contrasted against other state lottery operations. From 1985 to 1989, lottery operating expenses declined in New Hampshire by 53 percent, increased in Colorado by 87 percent, increased in Rhode Island by

89 percent, and increased in Ohio and Connecticut by 66 percent and 31 percent, respectively. During the same period the MSL operating expenses stayed fairly consistent, from 5.5 percent of total revenue in 1985 to 5.1 percent in 1989.

After adjusting for inflation, most state lottery operating expenses increased from fiscal year 1985 through fiscal year 1989 (see **Chart 8: "Inflation Adjusted Expense Growth"**). Four of the New England states showed large percentage increases (Maine by 362 percent, Vermont by 141 percent, New Hampshire by 129 percent, Rhode

INFLATION ADJUSTED EXPENSE GROWTH

(in thousands, 1985 dollars)

Fiscal Year	1985	1989	% Change
<i>California</i>	n/a	\$159,860	
<i>Ohio</i>	\$45,503	\$110,773	143.4%
<i>Florida</i>	n/a	\$96,354	
<i>New York</i>	\$59,757	\$92,382	54.6%
<i>Massachusetts</i>	\$67,446	\$67,378	-0.1%
<i>Michigan</i>	\$45,185	\$66,759	47.7%
<i>Pennsylvania</i>	\$24,167	\$51,276	112.2%
<i>Illinois</i>	\$22,528	\$42,188	87.3%
<i>New Jersey</i>	\$19,891	\$35,813	80.0%
<i>Virginia</i>	n/a	\$35,383	
<i>Connecticut</i>	\$16,959	\$26,680	57.3%
<i>Maryland</i>	\$25,220	\$20,311	-19.5%
<i>Missouri</i>	n/a	\$19,167	
<i>Arizona</i>	\$12,251	\$16,996	38.7%
<i>Iowa</i>	n/a	\$16,936	
<i>Washington</i>	\$18,538	\$16,930	-8.7%
<i>Wash DC</i>	\$16,814	\$15,330	-8.8%
<i>Colorado</i>	\$13,000	\$15,226	17.1%
<i>Oregon</i>	\$4,352	\$15,064	246.1%
<i>Kansas</i>	n/a	\$13,949	
<i>Wisconsin</i>	n/a	\$11,925	
<i>W. Virginia</i>	n/a	\$9,799	
<i>Maine</i>	\$1,875	\$8,663	362.0%
<i>Kentucky</i>	n/a	\$7,504	
<i>New Hampshire</i>	\$2,914	\$6,670	128.9%
<i>Rhode Island</i>	\$2,345	\$4,409	88.0%
<i>Delaware</i>	\$1,084	\$3,157	191.2%
<i>Vermont</i>	\$1,125	\$2,712	141.1%
<i>S. Dakota</i>	n/a	\$2,702	
<i>Montana</i>	n/a	\$2,351	

NOTE: Using state & local gov't purchases of goods and services deflator. Does not include agent commissions.

SOURCE: Saul Leonard Co.; U.S. Dept. of Commerce.

Island by 88 percent.) Of the nineteen lotteries operating since 1985, only four experienced declining real operating expenses: Maryland (19.5 percent), Washington, D.C. and Washington State (8.8 and 8.7 percent, respectively) and Massachusetts (by .1 percent).

The inflation adjusted drop in Massachusetts lottery expenses is due to a (real dollar) decrease in the advertising budget. In 1985 the MSL spent \$11.8 million on advertising. Four years later, the MSL advertising budget dropped by 12.7 percent to \$10.3 million (in 1985 dollars).⁵

Employee salaries make up the single largest component (11 percent) of MSL expenses (see Chart 9: “Major Lottery Expenses - 1990”). The 1990 salary percentage represents a marked decrease from the amount paid during the late 1970s — early 1980s when salaries made up 20-23 percent of total expenses. Printing costs and office supplies, and advertising constitute the two other major expense groups, the former equalling 10 percent of total expenses, the latter 9 percent.

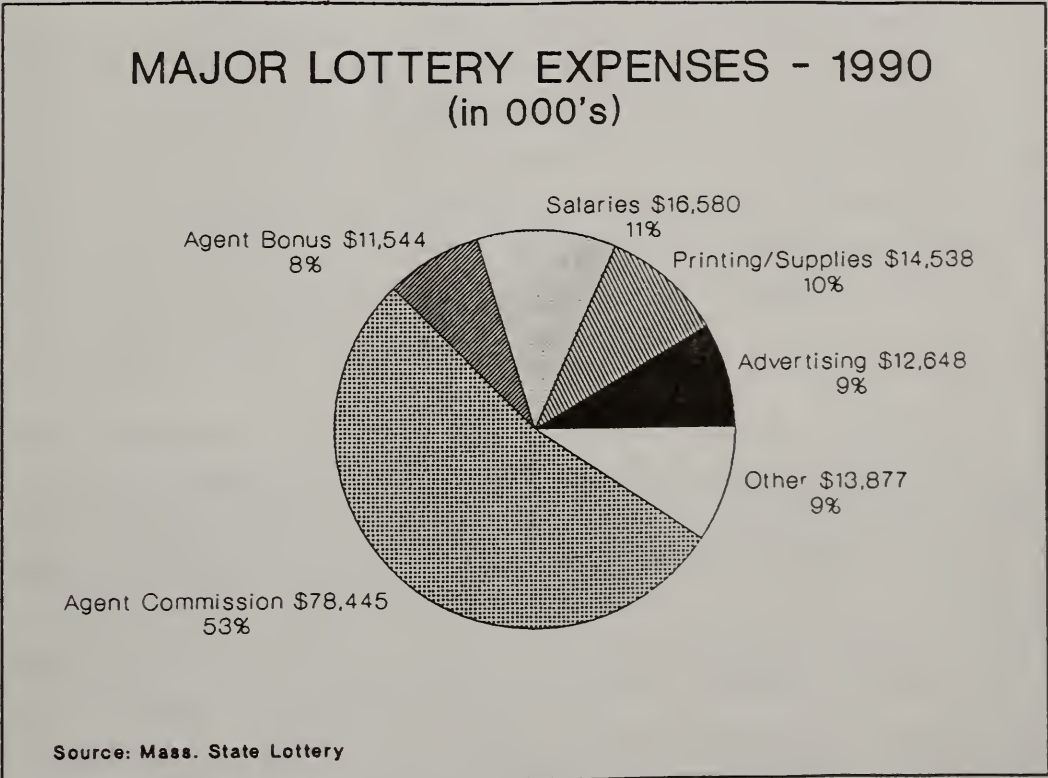


Chart 9

⁵ Using state and local government purchases of goods and services deflator from Bureau of Economic Analysis, United States Department of Commerce.

From 1985 through 1990, overall MSL lottery expenses grew by 67 percent (see **Appendix B**). When viewed as a percentage of expenses, agent commissions grew the most out of any single operating cost, from 48 percent in 1985 to 53 percent by 1990. Printing costs/office supplies also expanded, taking up 7 percent of expenses in 1985 and 10 percent in 1990. Employee salaries remained constant at 11 percent, while the advertising budget declined, from 13 percent of expenses in 1985 to 9 percent in 1990.

MEASURING THE VALUE OF OPERATING EXPENSES

The amount a state lottery spends on operating expenses does not necessarily reflect agency effectiveness. To measure lottery effectiveness, therefore, we contrasted each state's annual net income (the "profit" remaining after prize money and operating expenses), with the annual operating expenses, excluding agent commissions and bonus payments (see **Chart 10: "Net Income Generated Per Expense Dollar"**). This measure provides the net income (profit) generated per operating expense dollar.

The data indicate that although the MSL generated extraordinary gross revenue from fiscal year 1985 through fiscal year 1989, the Commonwealth realized fairly low levels of net income for each dollar spent on operating expenses. Massachusetts was at or below the average net income generated per expense dollar for four of the five years that we examined (see **Chart 10**). The low amount of net income that the MSL derives from each expense dollar is a direct consequence of the high percentage of gross revenue that the MSL dedicates to prize money.

The data also indicate, however, that the MSL generated more consistent levels of net income than many other state lotteries. Whereas the Maryland, New Jersey, Illinois, Pennsylvania, New York, and Delaware State Lotteries level of income per expense dollar dropped over the five year period (in some cases by over 100 percent), the Massachusetts State Lottery net income per expense dollar stayed relatively stable. These data reflect the increased percentages that the aforementioned states allocated to operating expenses.

Additionally, *the MSL was one of only seven states to experience an increase in net income per expense dollar during the period*

NET INCOME PER EXPENSE DOLLAR

Fiscal Year	1985	1986	1987	1988	1989
Maryland	\$10.45	\$16.11	\$13.69	\$13.70	\$13.98
New Jersey	\$19.65	\$22.56	\$22.83	\$12.42	\$12.64
Illinois	\$22.94	\$17.53	\$16.08	\$8.39	\$11.89
Pennsylvania	\$25.71	\$16.34	\$15.91	\$10.98	\$10.83
New York	\$10.04	\$8.58	\$8.03	\$7.34	\$7.64
Connecticut	\$8.77	\$9.34	\$8.89	\$9.09	\$7.00
Wisconsin					\$6.42
Delaware	\$13.85	\$13.43	\$12.74	\$6.61	\$6.40
Florida				\$4.23	\$6.39
Michigan	\$7.95	\$7.03	\$5.73	\$5.45	\$6.17
Massachusetts	\$5.79	\$5.54	\$5.89	\$7.25	\$5.91
California		\$6.13	\$3.62	\$4.67	\$5.46
Washington	\$2.85	\$4.35	\$4.50	\$4.12	\$5.33
Kentucky					\$5.33
Arizona	\$1.85	\$2.60	\$2.79	\$3.92	\$4.87
Rhode Island	\$7.92	\$8.69	\$8.17	\$4.27	\$4.58
Ohio	\$7.41	\$8.71	\$5.42	\$5.31	\$4.42
Vermont	\$1.10	\$1.46	\$3.26	\$3.48	\$3.95
New Hampshire	\$1.48	\$2.03	\$3.06	\$4.03	\$3.87
Virginia					\$3.53
Maine	\$2.34	\$2.71	\$3.05	\$2.97	\$2.99
Missouri		\$3.99	\$27.23	\$3.27	\$2.98
Wash. DC	\$1.90	\$1.93	\$1.77	\$3.04	\$2.96
Oregon	\$3.33	\$2.20	\$2.44	\$3.15	\$2.90
Iowa		\$1.96	\$2.91	\$2.45	\$2.57
S. Dakota				\$2.02	\$2.32
W. Virginia		\$3.39	\$1.96	\$1.24	\$1.68
Montana				\$2.27	\$1.05
Colorado	\$2.55	\$1.93	\$2.43	\$1.81	\$0.98
Kansas				\$1.57	\$0.92
MEAN	\$8.31	\$7.33	\$7.93	\$5.15	\$5.27

NOTE: Does not include agent commissions.

SOURCE: Saul Leonard Co.

Chart 10

examined, from \$5.79 in fiscal 1985 to \$5.91 in fiscal 1989. Nationally, the average net income per expense dollar dropped by 58 percent, from \$8.31 in 1985 to \$5.27 in 1989.

PART III: REVENUE GROWTH

Public lotteries represent one of the few revenue streams that have experienced positive growth over the past few years. As a result, many government programs and constituents across the country have become increasingly dependent upon lottery dollars.

In an effort to better understand the Massachusetts State Lottery revenue stream, we examined a) the revenue growth experience of the MSL from fiscal year 1972 through fiscal year 1990 and b) the effect of lottery expansion (new game development) on MSL revenue growth. Finally, we looked at c) the revenue growth history of other state lotteries from fiscal year 1985 through fiscal year 1990.

It should be noted that revenue *growth* does not necessarily reflect *gross* revenue. Growth rates measure the difference in revenue from one year to the next. Negative growth does not mean that a game lost money, rather, it means that a game did not generate as much money as in the previous year. “Section A) Revenue Growth: MSL” measures growth rates from the prior calendar year. “Section C) Revenue Growth: Inter-State” measures growth rates from the prior fiscal year.

A) REVENUE GROWTH: MSL

Lottery revenue growth is cyclical and dependent upon many variables, one of which is personal income.⁶ From 1973 through 1987 MSL revenue growth shows a positive correlation with personal income growth (see **Appendix C: “Personal Income Growth vs. MSL Growth”**).

During seven of the fourteen years studied, lottery revenue increased when personal income increased. Five of the seven years that lottery revenue did not correlate positively with personal income were, or subsequent to, ‘transition years’ when the MSL game portfolio expanded. This would indicate that the downturns in revenue growth were due to the portfolio change (see **below: The Revenue Effects of In-State Competition**). A future rise in personal income may positively affect lottery revenue growth.

Data provided by the MSL indicate that, with the exception of the Instant Game, each lottery game developed by the Commonwealth has shown strong initial growth that gradually slows over time (see **Chart 11: “Revenue Growth By Lottery Game”**). For example, Big Money generated \$56.3 million in its first year (1972), \$76.6 million

⁶ John L. Mikesell and C. Kurt Zorn, “State Lottery Sales: Separating the Influence of Markets and Game Structure,” *Growth and Change*, Fall 1987, 10-18. Other factors include the unemployment rate and inter-state competition.

REVENUE GROWTH BY LOTTERY GAME

(from prior calendar year)

	Big Money	Instant Games	Daily Number	Megabucks	Mass Millions	Total
1973	36%					37%
1974	-13%					9%
1975	-31%	182%				14%
1976	-12%	1%				28%
1977	-24%	0%	121%			26%
1978	-7%	-38%	28%			-1%
1979	4%	5%	11%			9%
1980	-7%	65%	15%			21%
1981	7%	0%	21%			13%
1982	-3%	-2%	38%			24%
1983	-10%	-2%	15%			9%
1984	-8%	64%	32%			97%
1985	-19%	103%	16%	128%		63%
1986	-55%	80%	8%	3%		17%
1987	-87%	45%	4%	-14%		11%
1988		21%	7%	-14%	94%	8%
1989		26%	4%	-11%	56%	12%
1990		7%	7%	-9%	-19%	1%

NOTE: Shading denotes introduction of new game.

SOURCE: Massachusetts State Lottery

Chart 11

in its second year (a 36 percent increase), yet dropped to \$67 million in its third year (a 12.5 percent decrease).

The Daily Number, Megabucks and Mass Millions games have all recorded similar growth rates. The Daily Number realized 121 percent second year growth (1977), yet single digit growth from 1985 through 1990. Megabucks realized 128 percent second year growth (1985), yet negative growth since 1986. Mass Millions realized 94 percent second year growth (1988), 56 percent third year growth, yet negative fourth year growth.

The most consistent revenue growth within the MSL is found in the Instant Game. The Instant Game growth rates have exceeded 40 percent six times during its history and more than 100 percent twice. Additionally, the Instant Game has shown continued strong performance during the years when new (lotto) games have been introduced. (Lotto games, where a player picks a sub-set from 36 or more numbers, are distinguished by extremely large jackpots.) In 1984

(when Megabucks was introduced), the Instant Game realized 64 percent growth. In 1987 (the first year of Mass Millions), Instant Game growth equalled 45 percent. This may indicate that new lotto games had the piggy-back effect of attracting new instant game players.

As a whole, MSL revenue growth has also been cyclical. In its first six years, the MSL averaged 22.8 percent revenue growth. During its second six year period (1977-1983) the average growth rate fell to 12.5 percent.

The strongest years of consecutive MSL revenue growth were from 1983-84 through 1984-85. These years center around the introduction of Megabucks. In 1984 MSL revenue increased by 97 percent. In 1985, total revenue rose by 63 percent. It has since averaged less than 10 percent per year.

B) THE EFFECT OF IN-STATE EXPANSION ON LOTTERY REVENUE

It is standard marketing practice to periodically introduce new lottery games. These new games not only provide the diversity necessary to maintain present consumer interest, but also attract new lottery players, thereby producing additional revenue. In an effort to establish the effects of new games on the lottery, we examined the revenue history of each MSL game since 1972 (see **Chart 12: "Gross Revenue By Lottery Game"**). The data indicate that while new lottery games bring in new revenue, the increase is, in part, generated at the expense of the existing lottery portfolio.

Big Money, the first MSL game, was introduced in 1972. In 1973, Big Money realized a 36 percent increase in revenue, yet a 13 percent decrease in 1974, the year that the Instant Games were developed. From 1974 to 1975, Big Money revenue decreased again, however Instant Games revenue increased by 182 percent. The 1975 combined Big Money/Instant Game revenue exceeded the 1974 combined Big Money/Instant Game revenue by \$10.2 million.

In 1976, the MSL introduced the Daily Number. During this year the combined Big Money/Instant Game revenue dropped by \$5.2 million. After 1976, Big Money revenue dropped steadily, dipping by 12 percent in 1976, 24 percent in 1977 and for six of the next seven years. Meanwhile, Instant Game revenue stopped growing in 1976,

GROSS REVENUE BY LOTTERY GAME

(in millions)

	<i>Big Money</i>	<i>Instant Games</i>	<i>Daily Number</i>	<i>Megabucks</i>	<i>Mass Millions</i>	<i>Total</i>
1972	\$56.3					\$56.3
1973	\$76.6					\$76.6
1974	\$67.0	\$17.1				\$84.1
1975	\$46.1	\$48.2				\$94.3
1976	\$40.6	\$48.5	\$33.5			\$122.6
1977	\$30.7	\$48.3	\$74.0			\$153.0
1978	\$28.4	\$30.1	\$94.4			\$152.9
1979	\$29.4	\$31.5	\$104.9			\$165.8
1980	\$27.4	\$52.0	\$120.2			\$199.6
1981	\$29.2	\$52.2	\$145.2			\$226.6
1982	\$28.3	\$51.1	\$200.5			\$279.9
1983	\$25.6	\$50.1	\$230.7			\$306.4
1984	\$23.5	\$82.1	\$305.3	\$192.1		\$603.0
1985	\$19.1	\$166.8	\$355.1	\$438.6		\$979.6
1986	\$8.6	\$300.3	\$382.4	\$453.5		\$1,144.8
1987	\$1.1	\$434.3	\$397.8	\$391.9	\$44.9	\$1,270.0
1988		\$526.4	\$425.4	\$335.5	\$86.9	\$1,374.2
1989		\$663.1	\$442.8	\$299.7	\$135.3	\$1,540.9
1990		\$706.7	\$475.9	\$271.8	\$109.0	\$1,563.4

NOTE: By calendar year. Shaded area denotes declining revenue.

SOURCE: Massachusetts State Lottery

Chart 12

fell in 1978 and suffered three years of negative or neutral revenue growth from 1981 through 1983. The Daily Number grew steadily every year after its inception.

In 1984, the MSL introduced the first lotto game, Megabucks. Megabucks resulted in the largest percentage revenue increase in MSL history. During this year both the Instant Games and the Daily Number realized a large revenue boost. After 1984, Big Money revenue dropped quicker than at any time during its history. In 1985, Big Money revenue dropped by 19 percent; in 1986 it dropped by 55 percent; in 1987 it dropped by 87 percent and was subsequently retired. During the same period the Daily Number suffered a drop in revenue growth. From 1976 through 1983, the Daily Number averaged annual revenue growth of 35 percent growth. After 1984, the Daily Number slowed to single digit revenue growth, averaging 9 percent from 1985 through 1990. (It should be noted that not all revenue dropped after

1984. The Instant Games realized 103 percent growth in 1985, 80 percent growth in 1986, and have since averaged 24 percent growth. Lottery officials attribute this success to an increase in the Instant Games prize percentage.)

In 1987 a second lotto game, Mass Millions, was introduced. During 1987 Megabucks suffered its first revenue decline, dropping by 14 percent, and has decreased each year since.

The experience of the MSL does not establish a clear relationship between the introduction of new lottery games and the revenue stream of the existing lottery portfolio. The amount of money generated by the new games introduced in 1974, 1976, 1984 and 1987 does not match the revenue lost in the existing games during those same years (see **Chart 12**). In only one year did a game's total revenue increase equal another game's total revenue decrease.

It would appear, however, that adding new games to the lottery portfolio does divert part of the existing revenue stream. The resulting loss is relatively minimal and may be just as attributable to player fatigue as to the portfolio expansion.

C) REVENUE GROWTH: INTER-STATE

Another dependent revenue growth variable is lottery maturity. One analyst has written that "as lotteries get older, their management gets more sophisticated, their offerings become more diverse and their customers develop buying habits. When all games are in the portfolio and formats start to get old, some decline is likely . . ."⁷

Data indicate that MSL revenue growth is consistent with the revenue growth found in state lotteries of equal age. The data indicate that Massachusetts may find it difficult to sustain lottery revenue growth.

To arrive at this conclusion we measured and compared the revenue growth rates of 21 state lotteries from fiscal year 1983 through 1990 (see **Chart 13: "Inter-State Annual Revenue Growth"**). (For example, in fiscal year 1985 the MSL generated \$1,235 million in gross revenue. One year later, lottery revenue increased by 13.7 percent, to \$1,403 million. In fiscal 1987, MSL revenue decreased by 9.9 percent, to \$1,265 million.)

⁷ John L. Mikesell and C. Kurt Zorn, *op. cit.*, p. 15.

INTER-STATE ANNUAL REVENUE GROWTH

Fiscal	1984	1985	1986	1987	1988	1989	1990*
MATURE LOTTERIES							
<i>Connecticut</i>	35.1%	35.4%	24.6%	14.0%	5.0%	-3.8%	6.2%
<i>Massachusetts</i>	55.8%	28.5%	13.7%	-9.9%	9.0%	12.4%	1.2%
<i>Michigan</i>	5.9%	50.0%	14.9%	1.8%	19.6%	-3.6%	-3.0%
<i>New Hampshire</i>	24.2%	-11.2%	125.1%	71.1%	31.1%	13.2%	8.4%
<i>New Jersey</i>	22.5%	9.3%	7.2%	12.6%	5.4%	6.2%	-3.3%
<i>New York</i>	38.2%	44.3%	4.5%	11.3%	8.0%	18.0%	-6.9%
<i>Pennsylvania</i>	41.4%	5.8%	-1.2%	1.4%	9.2%	8.9%	-3.2%
ESTABLISHED LOTTERIES							
<i>Delaware</i>	10.6%	17.0%	6.0%	11.8%	21.1%	15.3%	3.5%
<i>Illinois</i>	79.4%	36.0%	6.6%	1.5%	-0.2%	17.4%	2.6%
<i>Maine</i>	22.0%	-0.2%	143.6%	50.0%	42.9%	16.1%	1.8%
<i>Maryland</i>	16.0%	26.9%	5.5%	5.9%	6.7%	-8.0%	8.7%
<i>Ohio</i>	51.5%	41.6%	10.2%	13.6%	0.4%	37.2%	11.9%
<i>Rhode Island</i>	22.0%	-1.3%	8.8%	1.6%	6.0%	-0.1%	
<i>Vermont</i>	13.1%	1.6%	138.7%	104.0%	38.4%	12.2%	8.5%
YOUNG LOTTERIES							
<i>Arizona</i>	-20.8%	22.9%	65.9%	17.6%	21.4%	46.0%	14.1%
<i>Colorado</i>	-12.7%	-9.2%	1.6%	4.0%	-19.4%	-13.6%	73.8%
<i>Washington</i>	-17.1%	-9.6%	21.2%	7.0%	10.9%	18.9%	-4.0%
<i>Wash. DC</i>	58.8%	30.7%	6.3%	2.7%	1.1%	17.0%	2.4%
<i>Oregon</i>			108.7%	14.0%	59.8%	-2.7%	3.5%
<i>California</i>				-21.1%	51.1%	25.3%	-6.9%
<i>Iowa</i>				15.3%	36.2%	33.8%	-2.3%

* 1990 data are estimated.

NOTE: Annual Revenue Growth defined as the difference in gross revenue received from prior fiscal year.

SOURCE: Saul Leonard Co., Public Gaming International.

Chart 13

Each lottery was placed into one of three groups as determined by lottery age: Mature Lotteries — which were created prior to 1973; Established Lotteries — which were created between 1973 and 1978; and Young Lotteries — which were created between 1981 and 1986. The MSL, which was created in 1971, is in the Mature Lotteries group.

We found that Mature Lotteries averaged 17 percent growth from fiscal year 1983 through fiscal year 1990, while Established Lotteries averaged 23 percent growth, and Young Lotteries averaged 16 percent growth. State lottery revenue growth ranged from well over 100 percent (New Hampshire, 1986; Vermont, 1986, 1987; Oregon, 1986) to negative growth (Massachusetts, 1987; Maryland, 1989; Arizona, 1984; California, 1987). Again, it should be stressed that negative

growth reflects a drop in the rate of revenue growth, not in the revenue gross.

The data indicate that lottery growth may evolve in stages. Lotteries in the formative stage (represented as Young Lotteries) must gain public acceptance and, like many new ventures, weather a slow period before developing a successful operation. This nascent stage is marked by a large number of extreme negative growth periods (many of the negative growth periods in the Younger Lotteries category exceed 12 percent). Two Young Lotteries registered consecutive years of negative growth (Colorado, twice and Washington) while only one lottery in another category registered such growth (Michigan).

The second growth stage (represented as Established Lotteries) is often marked by rapid revenue growth due to game expansion, increased industry marketing, and public acceptance.

Many states introduce Lotto-type games during this stage. Lotto-games generally produce an immediate spike of new revenue, as evidenced by the MSL in 1984. The Established Lotteries show the fewest negative growth periods (only two periods exceed minus 1 percent) and the strongest positive growth periods (twelve periods exceed 25 percent growth; three periods exceed 100 percent growth). No state lottery in this group had two consecutive years of negative revenue growth.

The third growth stage (represented by Mature Lotteries), is often accompanied by a leveling in the rate of revenue growth. This may be due to market saturation, player fatigue or a combination of various economic factors (unemployment, change in income levels, et cetera). Although Mature Lotteries list among the highest growth rates in 1984 and 1985 they list among the lowest growth rates in 1989 and 1990. The number of negative growth periods in this group are greater than to the number of negative growth periods in the Established Lotteries and more extreme in value.

The progression through the three stages can be succinctly described as follows:

State lotteries typically start with simpler games, moving to more sophisticated games (numbers and lotto) as the population becomes more familiar with the system and as the lottery management gains more experience. Sales change as a state's lottery gets older. The games eventually lose their appeal and new alternatives become more difficult to find. States experiment with longer lotto odds and multi-state games to boost the prize pool, more frequent draws to generate enthusiasm,

more instant games, and different game structures, but the possibilities are finite.⁸ There is a point (about 11.25 years) where the lottery matures and sales begin to decline. New games, however, extend the time at which maturation leads to lower sales.⁹

The data compiled for this report indicate that the MSL is currently in the latter stage of development.

PART IV: OPTIONS FOR THE FUTURE AND CONCLUSION

During the past nineteen years, the per capita revenue index has established the Massachusetts State Lottery as an industry leader. The MSL returns the highest percentage of prize money in the country and enjoys one of the lowest operating cost percentages of all state lotteries.

The Lottery's success is based upon the extraordinary level of per capita lottery spending within the Commonwealth (\$265.68 in fiscal 1990). The MSL has recorded per capita gross revenue levels well above the national average since 1985. In spite of this envious record, caution must be exercised. *Should gross revenue regress toward the national average (\$94.53 in 1990) the MSL will lose millions in revenue. This loss will translate into a subsequent drop in net income, directly impacting municipal budgets across the Commonwealth.*

The potential revenue loss can be illustrated by contrasting the Massachusetts and California State Lotteries. In 1989, MSL per capita revenue was 180 percent above the national average, while California, the overall leader in gross revenue, listed per capita revenue 3 percent below the national average. *If, in 1989, the Massachusetts State Lottery generated per capita revenue at the same level as the California State Lottery, the Commonwealth would have generated only \$523 million in gross revenue, an effective decrease of \$1 billion. Likewise, had the California State Lottery generated per capita revenue at the Massachusetts rate, California would have generated \$6.2 billion in gross revenue, an effective increase of \$4.1 billion.*

⁸ John L. Mikesell, "The effect of Maturity and Competition on State Lottery Markets", *Journal of Policy Analysis and Management*, V. 6, No. 2, p. 252 and Mikesell.

⁹ John L. Mikesell and C. Kurt Zorn, *op. cit.*, p. 17-18.

During the course of this study, we could find no conclusive evidence to explain the extraordinary per capita revenue generation of the MSL. The dependence of the MSL on per capita revenue spending, however, places the Commonwealth in the precarious position of being a statistical outlier. The data indicate that MSL revenue growth has slowed dramatically since 1984. *A further erosion in lottery growth rates could force the Commonwealth to absorb a precipitous revenue decline.*

The MSL is at a cross-roads. It can work either to preserve the current flow of revenue, thereby guaranteeing \$1.5 billion per year in gross revenue, or it can attempt to expand the current revenue stream. The former option would create a measure of stability upon which municipal governments could depend. The latter option would attempt to increase the available pool of revenue.

PRESERVING THE REVENUE STREAM

To preserve the current revenue flow, the MSL would enter a “maintenance” phase emphasizing the retention of current player involvement. Any maintenance plan would have to emphasize marketing, to keep the lottery message alive, and game and/or format manipulation to keep player involvement strong. (The Instant Games, which are widely advertised, are popular, in part, because new games are constantly being introduced.) Lottery maintenance does not, however, preclude raising additional revenue.

- **The amount dedicated to net income could be increased by lowering lottery agent commissions.**

Reducing the agent commission percentage slightly should not cause a wide-spread reduction in lottery agents. The MSL currently lists the highest per capita lottery agent ratio in the country and has the third highest total of “on-line retailers” in the country.¹⁰ Both California and Florida, two states listing more on-line retailers, have agent commission rates below the national average. Reducing the agent commission rate from the current 5 percent of gross revenue to 4.0 percent would annually provide the Commonwealth with an additional \$17 million in net income.

¹⁰ “Lottery Update”, *Public Gaming International*, January 1990, page 12.

This adjustment is in contrast with a reported MSL plan calling for the lottery's advertising agency to "cut costs or lose the contract."¹¹ The advertising agency's annual income from the lottery contract is reported to equal \$1.5 - \$1.8 million dollars. If the advertising agency cut its costs by 50 percent, the MSL would save but \$825,000.

- **Reducing the advertising budget could prove to be counterproductive as experts agree that marketing is one tool that can make or break a lottery operation.**

In 1989, advertising composed 8 percent of the total amount spent on lottery expenses and equalled less than eight-tenths of 1 percent of the total gross revenue generated by the MSL. In 1984, the year that the MSL experienced its greatest revenue growth, advertising composed 14 percent of operating expenses. Advertising represents the only major operating expense category to decline as a percentage of the MSL budget.

State lotteries (like tourist bureaus) operate under the premise that money must be spent in the pursuit of money. Lottery advertising competes with other leisure activities for discretionary income. The long-term cost effectiveness of an advertising budget reduction is questionable.

EXPANDING THE REVENUE STREAM

If the MSL chooses to expand the current flow of revenue, the Commonwealth must identify a new revenue stream and tap into that source. The days of inducing new revenue through game creation may have passed. The single largest increase in Massachusetts lottery revenue was due to the creation of Megabucks in 1984. Three years later, the introduction of Mass Millions resulted in a decrease in Megabucks revenue. (The Commonwealth has since introduced Mass Cash, a third lotto game. It remains to be seen whether or not Mass Cash will draw revenue from the other two lotto games.)

The easiest way to expand the current revenue stream is to tap into an existing revenue stream. In 1976, the Daily Number was developed to divert funds from the illegal "street number" revenue stream.

¹¹ Laura Raposa, "Lottery ad agency faces lighter diet — without gravy," *The Boston Herald*, June 27, 1991.

- **The MSL should consider incorporating video game wagering, sports betting or another segment of the illegal gambling revenue stream into its portfolio.**

It is difficult to verify the total amount of money currently wagered illegally. Experts questioned during the course of this study estimate that, within the Commonwealth, the ratio of dollars wagered illegally to dollars wagered legally is at least 2:1 and possibly higher. The United States Department of Justice estimated that \$28.9 billion was wagered illegally within the country in 1983.¹² Adjusted for inflation, that figure would equal \$39 billion in 1990. This represents a sizeable pool of potential revenue that is currently being wagered illegally. It may be easier to incorporate a percentage of this revenue stream into the lottery's portfolio than to squeeze additional revenue from current MSL players, who now boast the highest per capita lottery spending level in the country.

MUNICIPAL LOTTERIES

Various community leaders have, over the past few years, petitioned for the development of local municipal lotteries. These proposals stem from the apparent disparity in the amount of lottery money wagered in each community versus the subsequent local aid lottery distribution.

Currently, there is no indication that legislative approval would be granted to allow municipal lotteries. Local lotteries would undoubtedly diminish the MSL revenue flow, be costly to run, and have dubious results. As one state representative said about his community's desire to operate a municipal lottery, "they can't get their tax bills out in time and they want to run a lottery?" This is not to imply, however, that the MSL should ignore the sentiment behind the perceived lottery distribution inequity.

- **The MSL should investigate incorporating regional or municipal sales figures into the lottery distribution formula.**

¹² "Sourcebook of Criminal Justice Statistics — 1989," The Hindelang Criminal Justice Research Center, Bureau of Justice Statistics, U.S. Dept. of Justice, 1990, page 828.

- **The MSL should investigate developing a regional lottery game, restricting game sales within certain boundaries and dedicating subsequent net income to the communities within the immediate sales region.**

In 1988, over 35 municipalities registered lower lottery sales than in the previous year. In 1990, over 170 municipalities registered lower lottery sales than in the previous year. A regional lottery game may attract new revenue by providing a residential sense of game “ownership” while affording the additional benefit of muting criticism against the perceived inequities in the lottery distribution.

CONCLUSION

The data examined for this report indicate that the MSL is highly dependent upon the level of per capita lottery spending within the Commonwealth. This spending is driven, in part by regional demographics, successful marketing, the lottery’s prize structure, and the lottery’s game portfolio. Although inter-state comparisons show that the MSL is one of the most successful operations in the country, recent data indicate that lottery revenue growth in the Commonwealth has slowed, and may soon stagnate, if not decline.

As the MSL dedicates a relatively small percentage of gross revenue to net income (profit), any reduction in gross revenue will translate into a subsequent reduction in local assistance to municipal governments across the Commonwealth. Given the present economic and political atmosphere, it is unlikely that a decline in lottery dollars will be supplanted by state funds. These factors require that the MSL strengthen its efforts to protect its already important contribution to municipal budgets across the Commonwealth.

This contribution (net income) could be increased in several ways. One way would be altering the revenue apportionment formula. If the prize structure was decreased, the savings could be shifted into a subsequent increase in net income. However, after speaking with various lottery experts around the country, we feel that this action should be kept in reserve. As there is no conclusive proof that a state lottery’s “take-out” rate affects or does not affect lottery sales, caution seems to be in order. If a formula adjustment resulted in reduced lottery sales, the adjustment would end up harming the very municipal

entities that it was designed to assist. In the Committee's view, this experiment should be conducted only after other less risky avenues have been pursued.

A safer method of increasing revenue would be to expand the potential market of the MSL. Market expansion could be accomplished by either manipulating the present portfolio (through game development or format changes), or by entering existing markets currently beyond the purview of the state lottery. The former option is not attractive as there is sufficient evidence to conclude that manipulating the present lottery portfolio may result more in shifting present revenue than in attracting new revenue. The best method of long-term lottery market expansion, therefore, may be in authorizing the MSL to explore the possibility of video gambling and sports betting, two markets which represent existing, untapped sources of revenue. Just as the Daily Number diverted revenue from the street number, so might the lottery capture a portion of the funds currently being wagered illegally across the Commonwealth.

APPENDICES

APPENDIX A

DOLLARS WAGERED vs. DOLLARS DISTRIBUTED: FY86 – FY90

CITY/ TOWN	Wagered FY86	Distributed FY86	Wagered FY87	Distributed FY87	Wagered FY88	Distributed FY88	Wagered FY89	Distributed FY89	Wagered FY90	Distributed FY90
Abington	\$3,831,255	\$488,560	\$4,334,025	\$474,581	\$4,977,053	\$602,745	\$5,477,812	\$868,355	\$5,505,288	\$868,355
Acton	\$1,419,855	\$321,954	\$1,469,579	\$312,742	\$1,499,012	\$395,796	\$1,588,309	\$561,997	\$1,484,664	\$561,997
Acushnet	\$1,307,780	\$366,515	\$1,419,901	\$356,028	\$1,547,459	\$455,820	\$1,678,880	\$675,181	\$1,587,464	\$675,181
Adams	\$1,705,272	\$496,418	\$2,010,155	\$482,214	\$2,289,264	\$626,100	\$2,727,220	\$955,231	\$2,558,568	\$955,231
Agawam	\$5,488,776	\$886,861	\$5,856,418	\$861,486	\$6,579,613	\$1,094,071	\$7,950,094	\$1,578,875	\$7,802,865	\$1,578,875
Alford		\$4,259		\$4,137		\$5,240		\$7,476		\$7,476
Amesbury	\$2,343,002	\$483,339	\$2,400,316	\$469,509	\$2,487,807	\$597,795	\$2,583,668	\$869,179	\$2,336,793	\$869,179
Amherst	\$959,329	\$1,810,829	\$983,773	\$1,759,016	\$1,162,503	\$2,235,177	\$1,443,520	\$3,211,807	\$1,488,522	\$3,211,807
Andover	\$1,784,453	\$378,838	\$2,087,857	\$367,999	\$2,020,864	\$462,704	\$2,146,327	\$646,913	\$2,282,318	\$646,913
Arlington	\$6,285,672	\$1,124,765	\$6,726,414	\$1,092,583	\$7,500,949	\$1,375,832	\$8,202,355	\$1,922,248	\$8,149,582	\$1,922,248
Ashburnham	\$473,684	\$116,567	\$543,449	\$113,333	\$566,902	\$146,323	\$608,202	\$226,304	\$561,317	\$226,304
Ashby	\$723,880	\$72,560	\$747,304	\$70,484	\$887,679	\$92,663	\$978,000	\$148,599	\$786,727	\$148,599
Ashfield	\$70,425	\$32,086	\$86,101	\$31,167	\$92,503	\$40,579	\$141,473	\$62,767	\$80,111	\$62,767
Ashland	\$1,818,864	\$180,053	\$1,967,849	\$174,901	\$1,990,650	\$224,231	\$2,207,025	\$335,103	\$2,313,226	\$335,103
Athol	\$2,529,292	\$457,234	\$2,837,110	\$444,151	\$3,180,335	\$559,975	\$3,646,295	\$793,165	\$3,680,453	\$793,165
Attleboro	\$12,019,389	\$1,274,175	\$13,030,692	\$1,237,717	\$13,571,063	\$1,554,714	\$14,951,222	\$2,179,782	\$14,579,360	\$2,179,782
Auburn	\$4,038,254	\$384,334	\$4,659,742	\$373,337	\$5,467,685	\$473,927	\$6,014,188	\$682,144	\$6,273,535	\$682,144
Avon	\$950,334	\$118,895	\$1,125,840	\$115,493	\$1,612,129	\$143,725	\$1,622,512	\$194,429	\$1,662,154	\$194,429
Ayer	\$2,115,108	\$220,274	\$2,256,655	\$213,971	\$2,428,033	\$268,232	\$2,639,388	\$373,144	\$2,563,005	\$373,144
Barnstable	\$7,535,613	\$322,330	\$8,236,528	\$313,107		\$405,864	\$10,369,171	\$623,694	\$10,734,139	\$623,694
Barre	\$631,385	\$166,380	\$686,068	\$161,619	\$840,749	\$206,431	\$810,070	\$303,704	\$809,257	\$303,704
Becket	\$129,304	\$15,397	\$178,031	\$14,956	\$283,136	\$19,880	\$241,969	\$32,962	\$242,954	\$32,962
Bedford	\$2,062,717	\$176,446	\$2,347,533	\$171,398	\$2,299,898	\$214,585	\$2,337,550	\$294,994	\$2,169,004	\$294,994
Belchertown	\$679,474	\$317,703	\$712,683	\$308,613	\$846,960	\$396,391	\$1,089,885	\$598,084	\$1,145,709	\$598,084
Bellingham	\$4,169,247	\$493,994	\$4,599,848	\$479,860	\$5,012,205	\$613,055	\$5,612,101	\$899,433	\$5,464,639	\$899,433
Belmont	\$3,481,549	\$462,406	\$3,681,481	\$449,176	\$3,887,373	\$563,283	\$4,355,741	\$779,453	\$4,770,166	\$779,453
Berkley	\$503,470	\$90,322	\$516,604	\$87,738	\$606,020	\$115,126	\$797,173	\$187,170	\$903,234	\$187,170
Berlin	\$286,883	\$58,752	\$378,960	\$57,071	\$440,123	\$72,420	\$549,039	\$103,956	\$542,635	\$103,956
Bernardston	\$725,569	\$56,546	\$703,211	\$54,928	\$731,712	\$69,901	\$957,330	\$101,350	\$775,947	\$101,350

Beverly	\$5,030,364	\$977,747	\$6,067,155	\$949,771	\$6,760,829	\$1,189,456	\$7,400,764	\$1,639,520	\$7,523,035	\$1,639,520
BillERICA	\$7,072,090	\$960,175	\$7,617,601	\$932,702	\$8,202,922	\$1,166,420	\$9,136,312	\$1,609,464	\$9,063,115	\$1,609,464
Blackstone	\$2,674,597	\$294,499	\$3,014,547	\$286,072	\$2,957,552	\$361,869	\$3,293,059	\$521,038	\$3,238,345	\$521,038
Blandford		\$27,347	\$12,900	\$26,564	\$37,738	\$33,847	\$42,898	\$49,520	\$26,317	\$49,520
Bolton	\$344,701	\$36,733	\$402,767	\$35,682	\$383,949	\$45,676	\$473,700	\$67,821	\$440,760	\$67,821
Boston	\$158,166,095	\$15,061,641	\$173,214,006	\$14,630,684	\$187,699,701	\$18,321,451	\$204,173,915	\$25,328,750	\$210,139,826	\$25,328,750
Bourne	\$2,715,838	\$226,081	\$3,214,355	\$219,612	\$281,880	\$3,936,334	\$4,332,830	\$422,332	\$4,332,830	\$422,332
Boxborough	\$253,261	\$52,287	\$322,951	\$50,791	\$364,015	\$63,656	\$363,270	\$87,548	\$327,819	\$87,548
Boxford	\$107,399	\$85,388	\$121,224	\$83,078	\$105,576	\$169,711	\$154,783	\$115,391	\$154,783	\$115,391
Boylston	\$261,075	\$87,106	\$237,247	\$84,614	\$277,648	\$106,019	\$364,340	\$147,587	\$386,641	\$147,587
Braintree	\$9,731,136	\$829,158	\$10,437,162	\$805,433	\$9,369,017	\$1,010,207	\$9,758,626	\$1,396,952	\$9,666,672	\$1,396,952
Brewster	\$570,681	\$52,927	\$666,507	\$51,412	\$66,776	\$811,233	\$104,810	\$885,889	\$104,810	\$885,889
Bridgewater	\$2,016,929	\$632,667	\$2,108,959	\$614,565	\$2,324,036	\$783,422	\$2,686,301	\$1,147,511	\$2,779,657	\$1,147,511
Brimfield	\$70,129	\$66,483	\$32,802	\$64,581	\$84,582	\$28,807	\$135,117	\$177,682	\$135,117	\$177,682
Brockton	\$23,867,222	\$4,070,399	\$27,257,460	\$3,953,933	\$31,579,765	\$4,997,284	\$41,263,053	\$7,065,663	\$43,924,414	\$7,065,663
Brookfield	\$354,916	\$93,635	\$312,265	\$90,955	\$118,828	\$726,869	\$187,793	\$310,023	\$187,793	\$310,023
Brookline	\$4,036,175	\$1,023,036	\$4,380,683	\$993,764	\$4,837,366	\$1,240,442	\$5,172,104	\$1,691,580	\$5,285,313	\$1,691,580
Buckland	\$112,260	\$58,287	\$183,528	\$56,620	\$261,122	\$73,083	\$246,686	\$110,247	\$282,336	\$110,247
Burlington	\$4,918,246	\$349,926	\$4,845,215	\$339,913	\$4,990,925	\$423,897	\$5,679,206	\$577,273	\$5,446,825	\$577,273
Cambridge	\$17,249,868	\$2,051,715	\$19,220,691	\$1,993,010	\$20,667,951	\$2,505,704	\$22,343,739	\$3,494,077	\$22,954,534	\$3,494,077
Canton	\$3,322,877	\$311,050	\$3,486,517	\$302,150	\$4,132,787	\$385,014	\$4,421,018	\$560,411	\$4,374,466	\$560,411
Carlisle	\$61,367	\$38,936	\$58,374	\$37,822	\$50,944	\$48,538	\$52,983	\$73,333	\$45,384	\$73,333
Carver	\$1,102,167	\$216,393	\$1,299,974	\$210,201	\$1,370,033	\$277,406	\$1,525,854	\$461,625	\$1,690,615	\$461,625
Charlemon	\$150,640	\$29,047	\$166,928	\$28,216	\$148,585	\$37,374	\$178,133	\$60,191	\$179,912	\$60,191
Charlton	\$1,050,851	\$230,404	\$1,244,687	\$223,976	\$1,385,367	\$288,163	\$1,728,195	\$437,879	\$1,616,982	\$437,879
Chatham	\$776,456	\$36,520	\$965,388	\$35,475	\$45,341	\$1,037,178	\$66,460	\$1,035,490	\$66,460	\$1,035,490
Chelmsford	\$4,647,868	\$720,840	\$4,283,205	\$700,214	\$4,927,299	\$874,043	\$5,426,802	\$1,199,962	\$5,205,322	\$1,199,962
Chelsea	\$9,610,315	\$1,220,626	\$10,735,604	\$1,185,700	\$11,604,164	\$1,503,923	\$12,816,258	\$2,150,299	\$13,059,965	\$2,150,299
Cheshire	\$250,092	\$110,377	\$278,559	\$107,218	\$422,370	\$139,851	\$455,482	\$216,860	\$463,166	\$216,860
Chester	\$179,646	\$33,436	\$223,697	\$32,479	\$267,824	\$41,970	\$304,472	\$63,812	\$263,957	\$63,812
Chesterfield		\$24,519	\$2,700	\$23,818	\$26,156	\$31,200	\$74,665	\$49,335	\$69,944	\$49,335
Chicopee	\$12,449,303	\$2,259,158	\$14,009,513	\$2,194,517	\$17,833,208	\$2,788,896	\$20,599,386	\$4,030,865	\$20,301,679	\$4,030,865
Chilmark		\$769		\$747		\$934		\$1,300		\$1,300
Clarksburg	\$16,800	\$94,409	\$23,331	\$91,707	\$64,894	\$115,737	\$90,708	\$164,188	\$75,198	\$164,188

CITY/ TOWN	Wagered FY86	Distributed FY86	Wagered FY87	Distributed FY87	Wagered FY88	Distributed FY88	Wagered FY89	Distributed FY89	Wagered FY90	Distributed FY90
Clinton	\$2,904,550	\$526,428	\$3,259,483	\$511,365	\$3,723,306	\$643,129	\$4,455,579	\$899,891	\$4,400,205	\$899,891
Cohasset	\$713,967	\$104,156	\$760,428	\$101,175	\$813,390	\$128,648	\$1,018,224	\$185,537	\$1,025,340	\$185,537
Colrain	\$100,208	\$43,175	\$118,461	\$41,940	\$114,229	\$54,090	\$36,511	\$82,323		\$82,323
Concord	\$1,059,778	\$224,144	\$1,083,587	\$217,731	\$1,224,637	\$275,043	\$1,385,001	\$389,973	\$1,353,552	\$389,973
Conway		\$34,390	\$3,900	\$33,406	\$4,200	\$43,068	\$20,814	\$65,232	\$44,141	\$65,232
Cummington		\$14,326		\$13,916	\$24,316	\$18,117	\$64,974	\$28,415	\$54,357	\$28,415
Dallon	\$765,706	\$218,931	\$1,046,704	\$212,667	\$1,420,859	\$271,146	\$1,564,523	\$392,808	\$1,416,425	\$392,808
Danvers	\$5,637,083	\$495,484	\$6,202,181	\$481,307	\$6,610,045	\$604,843	\$7,350,938	\$844,616	\$7,487,405	\$844,616
Dartmouth	\$3,792,790	\$546,868	\$4,159,755	\$531,220		\$685,633	\$4,799,064	\$1,038,943	\$5,547,505	\$1,038,943
Dedham	\$5,316,950	\$551,579	\$5,852,271	\$535,797	\$6,713,304	\$676,272	\$7,506,752	\$952,074	\$7,954,253	\$952,074
Deerfield	\$925,765	\$102,039	\$1,068,625	\$99,119	\$1,334,064	\$126,701	\$1,518,275	\$187,385	\$1,266,322	\$187,385
Dennis	\$2,169,069	\$99,764	\$2,324,686	\$96,910		\$125,041	\$2,730,528	\$188,439	\$2,914,370	\$188,439
Dighton	\$645,686	\$163,557	\$740,552	\$159,011	\$922,071	\$201,353	\$1,043,322	\$288,114	\$1,111,262	\$288,114
Douglas	\$624,490	\$106,130	\$763,324	\$103,094	\$802,277	\$135,532	\$824,347	\$215,587	\$799,172	\$215,587
Dover	\$76,614	\$48,226	\$93,136	\$46,846	\$112,725	\$59,212	\$152,736	\$84,049	\$107,514	\$84,049
Dracut	\$5,135,541	\$680,652	\$5,517,958	\$661,702	\$5,838,935	\$842,106	\$6,434,235	\$1,231,549	\$6,535,848	\$1,231,549
Dudley	\$1,924,578	\$330,998	\$2,260,892	\$321,527	\$2,325,669	\$409,247	\$2,597,571	\$595,079	\$2,562,695	\$595,079
Dunstable	\$479,733	\$35,499	\$463,866	\$34,484	\$445,868	\$43,833	\$513,970	\$64,353	\$468,999	\$64,353
Duxbury	\$762,891	\$186,406	\$890,294	\$181,073	\$939,311	\$232,512	\$1,048,320	\$348,682	\$1,071,645	\$348,682
E. Bridgewater	\$1,330,726	\$318,056	\$1,390,734	\$308,955	\$1,526,714	\$395,691	\$1,695,561	\$582,170	\$1,868,490	\$582,170
E. Brookfield	\$446,778	\$69,570	\$575,228	\$67,579	\$761,749	\$86,549	\$945,988	\$127,196	\$928,129	\$127,196
E. Longmead	\$3,320,055	\$316,419	\$3,379,403	\$307,365	\$3,725,627	\$388,454	\$4,415,729	\$554,557	\$4,484,920	\$554,557
Eastham	\$410,106	\$24,324	\$515,255	\$23,628		\$30,443	\$551,741	\$46,608	\$489,313	\$46,608
Easthampton	\$2,639,888	\$643,008	\$3,030,337	\$624,609	\$3,461,096	\$798,361	\$4,023,331	\$1,172,066	\$4,184,378	\$1,172,066
Easton	\$2,649,584	\$438,382	\$2,973,249	\$425,839	\$3,373,565	\$543,282	\$3,880,014	\$804,820	\$3,620,315	\$804,820
Edgartown	\$518,630	\$6,379	\$549,953	\$6,196	\$603,674	\$8,182	\$665,544	\$13,505	\$675,648	\$13,505
Egremont	\$9,600	\$18,202	\$50,880	\$17,681	\$53,949	\$22,187	\$74,259	\$31,008	\$72,300	\$31,008
Erving	\$49,848	\$8,650	\$111,799	\$8,435	\$125,157	\$11,418	\$156,947	\$19,294	\$140,785	\$19,294
Essex	\$386,449	\$53,952	\$485,862	\$52,409	\$558,719	\$66,082	\$610,076	\$93,315	\$590,152	\$93,315
Everett	\$8,061,183	\$738,277	\$8,969,511	\$717,153	\$10,059,824	\$908,648	\$11,462,972	\$1,297,821	\$12,473,092	\$1,297,821
Fairhaven	\$3,987,462	\$505,995	\$4,567,589	\$491,517	\$5,115,272	\$620,266	\$5,682,710	\$876,942	\$5,817,722	\$876,942

Fall River	\$19,806,310	\$5,799,119	\$22,796,106	\$5,633,189	\$25,345,423	\$7,215,590	\$28,296,913	\$10,599,953	\$28,837,672	\$10,599,953
Falmouth	\$4,189,693	\$263,416	\$4,679,514	\$255,879		\$327,370	\$5,981,295	\$482,709	\$6,093,674	\$482,709
Fitchburg	\$7,504,377	\$1,854,537	\$8,604,368	\$1,801,473	\$9,330,466	\$2,300,775	\$10,470,176	\$3,352,779	\$10,064,224	\$3,352,779
Florida	\$21,300	\$7,541	\$39,300	\$7,325	\$59,100	\$9,529	\$198,241	\$14,663	\$263,155	\$14,663
Foxborough	\$2,591,441	\$358,388	\$2,163,676	\$348,133	\$2,335,139	\$449,595	\$2,653,374	\$679,362	\$2,890,690	\$679,362
Framingham	\$8,320,320	\$1,408,106	\$9,680,738	\$1,367,816	\$10,000,662	\$1,710,439	\$11,035,470	\$2,346,698	\$10,899,316	\$2,346,698
Franklin	\$2,719,044	\$570,123	\$2,998,943	\$553,810	\$3,217,543	\$695,929	\$3,871,758	\$976,800	\$4,157,850	\$976,800
Freestown	\$922,295	\$200,108	\$1,105,056	\$194,382	\$1,261,143	\$247,892	\$1,605,180	\$366,806	\$1,769,785	\$366,806
Gardner	\$4,323,783	\$829,170	\$4,913,735	\$805,445	\$5,163,807	\$1,025,266	\$5,931,800	\$1,489,651	\$5,868,321	\$1,489,651
Gay Head		\$680		\$661		\$819		\$1,134		\$1,134
Georgetown	\$754,050	\$154,742	\$911,632	\$150,314	\$983,966	\$190,523	\$1,118,897	\$273,440	\$1,063,439	\$273,440
Gill	\$95,211	\$40,873	\$127,802	\$39,733	\$136,930	\$51,031	\$158,292	\$76,051	\$137,840	\$76,051
Gloucester	\$6,494,300	\$613,889	\$7,889,169	\$596,324	\$8,481,924	\$750,450	\$10,056,682	\$1,053,027	\$9,917,013	\$1,053,027
Goshen		\$13,270		\$12,890	\$14,803	\$16,646	\$93,397	\$25,282	\$93,985	\$25,282
Gosnold		\$91		\$90		\$113		\$155		\$155
Grafton	\$2,402,718	\$336,874	\$2,626,549	\$327,235	\$2,612,286	\$413,255	\$2,754,743	\$585,170	\$2,857,539	\$585,170
Granby	\$811,971	\$192,270	\$558,379	\$186,768	\$932,556	\$240,820	\$1,110,953	\$362,215	\$1,084,449	\$362,215
Granville	\$8,055	\$24,174	\$10,200	\$23,482	\$13,800	\$31,057	\$65,742	\$50,349	\$64,271	\$50,349
G. Barrington	\$1,372,766	\$191,714	\$1,387,631	\$186,228	\$1,411,528	\$238,096	\$1,490,442	\$348,862	\$1,450,473	\$348,862
Greenfield	\$3,399,552	\$759,943	\$3,625,769	\$738,199	\$3,792,532	\$933,048	\$4,126,655	\$1,322,403	\$4,551,283	\$1,322,403
Groton	\$676,817	\$137,302	\$684,399	\$133,373	\$744,411	\$171,540	\$807,222	\$258,360	\$885,543	\$258,360
Groveland	\$1,228,151	\$157,732	\$1,334,463	\$153,219	\$1,416,995	\$195,593	\$1,482,814	\$286,183	\$1,412,372	\$286,183
Hadley	\$614,242	\$67,638	\$731,242	\$65,703		\$84,613	\$1,039,770	\$126,521	\$965,577	\$126,521
Halifax	\$937,664	\$206,539	\$1,065,302	\$200,630		\$254,156	\$1,414,470	\$366,662	\$1,401,836	\$366,662
Hamilton	\$620,027	\$144,330	\$577,965	\$140,201	\$564,854	\$178,446	\$598,330	\$259,008	\$527,729	\$259,008
Hampden	\$497,291	\$147,536	\$512,608	\$143,315	\$548,910	\$183,394	\$692,221	\$269,450	\$692,878	\$269,450
Hancock		\$11,343		\$11,019		\$14,087		\$20,587		\$20,587
Hanover	\$2,884,025	\$273,299	\$3,110,981	\$265,480	\$3,443,342	\$330,427	\$3,974,409	\$449,091	\$3,942,841	\$449,091
Hanson	\$1,325,959	\$305,987	\$1,452,237	\$297,231	\$1,505,242	\$378,668	\$1,781,493	\$550,389	\$1,942,906	\$550,389
Hardwick	\$43,791	\$95,038	\$224,318	\$92,319	\$269,301	\$118,725	\$312,655	\$177,424	\$277,787	\$177,424
Harvard		\$480,341		\$466,597		\$593,774	\$49,276	\$859,172	\$114,211	\$859,172
Harwich	\$1,053,707	\$73,093	\$1,142,790	\$71,223		\$93,330	\$1,364,466	\$146,892	\$1,347,439	\$146,892
Hatfield	\$265,891	\$70,796	\$314,221	\$68,770	\$324,449	\$90,466	\$449,723	\$143,351	\$415,133	\$143,351
Haverhill	\$10,358,490	\$1,710,549	\$11,670,241	\$1,661,606	\$12,608,818	\$2,090,524	\$14,182,240	\$2,938,215	\$13,641,596	\$2,938,215

CITY/ TOWN	Wagered FY86	Distributed FY86	Wagered FY87	Distributed FY87	Wagered FY88	Distributed FY88	Wagered FY89	Distributed FY89	Wagered FY90	Distributed FY90
Hawley		\$4,812		\$4,675		\$6,301		\$10,846		\$10,846
Heath		\$8,673	\$8,400	\$8,425	\$5,668	\$10,761		\$16,012		\$16,012
Hingham	\$2,454,790	\$364,469	\$2,702,298	\$354,041	\$2,700,501	\$443,888	\$2,975,024	\$613,940	\$2,949,817	\$613,940
Hinsdale	\$128,957	\$42,373	\$178,941	\$41,160	\$209,651	\$52,405	\$253,563	\$76,933	\$248,031	\$76,933
Holbrook	\$3,160,205	\$362,776	\$3,487,639	\$352,396	\$4,029,289	\$450,140	\$4,348,853	\$657,179	\$4,659,638	\$657,179
Holden	\$1,674,839	\$350,344	\$1,918,059	\$340,320	\$2,203,269	\$436,089	\$2,312,691	\$645,879	\$2,191,250	\$645,879
Holland	\$173,526	\$34,766	\$266,524	\$33,771	\$282,681	\$42,449	\$204,479	\$60,707	\$217,047	\$60,707
Holliston	\$860,191	\$289,618	\$974,257	\$281,331	\$1,104,514	\$356,295	\$1,244,529	\$509,293	\$1,191,629	\$509,293
Holyoke	\$8,889,310	\$2,473,302	\$9,959,521	\$2,403,636	\$10,672,703	\$3,001,665	\$12,104,055	\$4,094,272	\$11,918,209	\$4,094,272
Hopedale	\$174,416	\$117,651	\$210,532	\$114,285	\$238,300	\$143,929	\$285,154	\$202,407	\$392,375	\$202,407
Hopkinton	\$766,273	\$123,146	\$703,608	\$119,623	\$719,439	\$152,798	\$731,574	\$226,995	\$787,602	\$226,995
Hubbardston	\$168,420	\$43,604	\$200,174	\$42,401	\$235,953	\$55,477	\$233,003	\$87,802	\$215,879	\$87,802
Hudson	\$2,899,370	\$472,694	\$3,122,875	\$459,169	\$3,331,661	\$591,287	\$3,570,168	\$886,406	\$3,720,790	\$886,406
Hull	\$1,951,040	\$256,918	\$2,130,578	\$249,806	\$2,326,652	\$313,828	\$2,835,045	\$436,652	\$3,000,113	\$436,652
Huntington	\$349,421	\$56,780	\$301,507	\$55,155	\$319,861	\$73,037	\$344,243	\$118,493	\$395,739	\$118,493
Ipswich	\$1,626,242	\$252,626	\$1,768,791	\$245,397	\$1,697,513	\$308,868	\$1,649,547	\$434,439	\$1,630,768	\$434,439
Kingsston	\$1,798,458	\$190,599	\$1,961,805	\$185,146	\$2,190,310	\$234,372	\$2,424,378	\$339,197	\$2,620,968	\$339,197
Lakeville	\$898,658	\$156,262	\$1,071,596	\$151,791	\$1,255,621	\$195,308	\$1,539,057	\$300,083	\$1,647,093	\$300,083
Lancaster	\$45,193	\$210,448	\$62,627	\$204,427	\$64,380	\$260,313	\$62,499	\$374,421	\$143,334	\$374,421
Lanesborough	\$56,474	\$111,658	\$78,047	\$108,464	\$109,428	\$137,279	\$227,200	\$195,636	\$312,900	\$195,636
Lawrence	\$13,483,327	\$3,309,656	\$14,579,732	\$3,214,957	\$15,135,469	\$4,078,817	\$16,207,266	\$5,836,576	\$15,684,468	\$5,836,576
Lee	\$1,116,290	\$197,569	\$1,210,109	\$191,916	\$1,421,122	\$241,340	\$1,704,179	\$336,970	\$1,550,754	\$336,970
Leicester	\$1,626,651	\$397,042	\$1,768,180	\$385,682	\$1,723,600	\$494,257	\$1,946,674	\$731,098	\$1,595,745	\$731,098
Lenox	\$593,871	\$187,092	\$710,151	\$181,738	\$789,001	\$229,065	\$1,074,441	\$322,730	\$1,025,665	\$322,730
Leominster	\$7,230,273	\$1,184,198	\$8,531,523	\$1,150,314	\$9,116,173	\$1,453,406	\$10,103,407	\$2,065,948	\$9,561,247	\$2,065,948
Leverett		\$34,499		\$33,512		\$42,816		\$63,394		\$63,394
Lexington	\$1,955,663	\$399,560	\$2,014,277	\$388,128	\$2,363,844	\$486,726	\$2,350,218	\$673,569	\$2,448,551	\$673,569
Leyden		\$10,465		\$10,178		\$13,310		\$21,624		\$21,624
Lincoln	\$127,012	\$109,900	\$135,558	\$106,755	\$135,702	\$135,166	\$150,626	\$194,046	\$128,634	\$194,046
Littleton	\$739,777	\$126,494	\$813,420	\$122,875	\$1,071,145	\$156,129	\$1,201,053	\$225,242	\$1,252,854	\$225,242
Longmeadow	\$3,075,760	\$335,968	\$2,924,380	\$326,355	\$2,976,147	\$415,198	\$3,350,809	\$601,843	\$3,023,179	\$601,843
Lowell	\$19,177,361	\$4,027,678	\$21,428,377	\$3,912,434		\$4,886,191	\$25,163,455	\$6,686,732	\$24,677,396	\$6,686,732

Ludlow	\$2,952,486	\$678,591	\$3,349,294	\$659,175	\$4,087,199	\$838,241	\$4,965,407	\$1,216,144	\$4,981,288	\$1,216,144
Lunenburg	\$953,451	\$233,178	\$1,135,167	\$226,506	\$1,259,887	\$291,669	\$1,408,551	\$436,457	\$1,220,347	\$436,457
Lynn	\$23,674,688	\$3,099,180	\$26,637,182	\$3,010,503	\$30,783,149	\$3,771,202	\$36,486,944	\$5,206,468	\$38,049,453	\$5,206,468
Lynnfield	\$632,277	\$180,738	\$715,473	\$175,567	\$762,303	\$221,455	\$810,875	\$313,392	\$704,651	\$313,392
Malden	\$12,561,061	\$1,958,048	\$14,220,312	\$1,902,022	\$15,559,917	\$2,415,784	\$16,948,535	\$3,476,396	\$17,618,313	\$3,476,396
Manchester	\$317,095	\$64,570	\$309,604	\$62,722	\$294,381	\$79,377	\$294,173	\$112,744	\$288,316	\$112,744
Mansfield	\$2,008,143	\$275,904	\$2,566,015	\$268,009	\$2,835,941	\$340,421	\$3,288,994	\$495,870	\$3,392,973	\$495,870
Marblehead	\$1,250,716	\$266,659	\$1,462,364	\$259,030	\$1,617,324	\$326,042	\$1,687,091	\$456,611	\$1,507,113	\$456,611
Marion	\$575,721	\$44,213	\$824,116	\$42,948	\$842,861	\$54,717	\$912,201	\$80,006	\$808,003	\$80,006
Marlborough	\$5,117,807	\$815,203	\$5,834,429	\$791,877	\$6,149,196	\$983,560	\$7,237,515	\$1,322,537	\$6,770,757	\$1,322,537
Marshfield	\$3,600,460	\$502,223	\$4,102,257	\$487,853	\$4,541,962	\$617,560	\$4,839,044	\$882,859	\$4,594,303	\$882,859
Mashpee	\$1,230,476	\$20,191	\$1,349,289	\$19,614	\$779,584	\$26,143	\$1,935,924	\$45,869	\$2,009,458	\$45,869
Mattapoisett	\$542,611	\$105,981	\$614,169	\$102,948	\$779,584	\$130,855	\$898,666	\$189,722	\$798,908	\$189,722
Maynard	\$1,573,431	\$266,297	\$1,775,327	\$258,677	\$2,155,968	\$324,009	\$2,303,115	\$448,551	\$2,373,943	\$448,551
Medfield	\$1,046,485	\$211,933	\$1,086,520	\$205,869	\$1,129,732	\$260,233	\$1,320,765	\$369,925	\$1,490,589	\$369,925
Medford	\$13,192,177	\$1,889,785	\$14,130,448	\$1,835,713	\$15,513,554	\$2,305,199	\$17,003,159	\$3,205,793	\$17,743,432	\$3,205,793
Medway	\$1,329,073	\$210,971	\$1,375,087	\$204,935	\$1,400,986	\$258,523	\$1,446,563	\$368,567	\$1,465,253	\$368,567
Melrose	\$3,155,186	\$851,352	\$3,016,003	\$826,992	\$3,244,102	\$1,031,496	\$3,815,797	\$1,404,917	\$3,837,330	\$1,404,917
Mendon	\$558,032	\$75,811	\$693,853	\$73,642	\$677,400	\$92,387	\$828,486	\$129,671	\$822,414	\$129,671
Merrimac	\$732,017	\$171,159	\$871,167	\$166,262	\$806,452	\$209,899	\$894,935	\$298,610	\$875,227	\$298,610
Methuen	\$13,520,350	\$1,130,900	\$14,339,099	\$1,098,542	\$15,329,520	\$1,389,108	\$17,562,899	\$1,984,668	\$16,241,857	\$1,984,668
Middleboro	\$2,530,864	\$544,609	\$3,030,115	\$529,026	\$3,272,893	\$675,005	\$3,972,920	\$987,857	\$4,245,593	\$987,857
Middlefield		\$10,320		\$10,025		\$12,740	\$9,134	\$18,712	\$24,029	\$18,712
Middleton	\$1,101,400	\$75,882	\$1,209,764	\$73,711	\$1,245,530	\$94,415	\$1,468,619	\$141,302	\$1,491,148	\$141,302
Milford	\$4,891,944	\$788,417	\$5,421,700	\$765,858	\$6,252,339	\$960,968	\$7,011,173	\$1,336,410	\$6,828,855	\$1,336,410
Millbury	\$2,519,454	\$423,194	\$2,677,273	\$411,085	\$3,055,924	\$521,761	\$3,698,248	\$751,716	\$3,823,782	\$751,716
Millis	\$814,155	\$176,391	\$1,038,174	\$171,343	\$1,166,765	\$215,166	\$1,464,620	\$301,621	\$1,514,043	\$301,621
Millville	\$1,085,716	\$65,532	\$1,189,677	\$63,657	\$1,246,090	\$83,670	\$1,385,939	\$133,656	\$1,278,928	\$133,656
Milton	\$1,594,662	\$582,867	\$1,684,965	\$566,190	\$1,896,599	\$711,013	\$2,003,270	\$988,962	\$1,939,792	\$988,962
Monroe		\$2,691	\$600	\$2,614		\$3,265		\$4,435		\$4,435
Monson	\$1,172,119	\$310,626	\$1,283,812	\$301,738	\$1,197,813	\$383,976	\$1,415,582	\$560,283	\$1,396,291	\$560,283
Montague	\$1,379,759	\$284,874	\$1,525,690	\$276,723	\$1,934,746	\$353,147	\$2,239,787	\$515,347	\$2,239,388	\$515,347
Monterey		\$10,133		\$9,843		\$12,843		\$20,111		\$20,111
Montgomery		\$17,915		\$17,402		\$22,351		\$33,588		\$33,588

CITY/ TOWN	Wagered FY86	Distributed FY86	Wagered FY87	Distributed FY87	Wagered FY88	Distributed FY88	Wagered FY89	Distributed FY89	Wagered FY90	Distributed FY90
Mt. Washington		\$520		\$505		\$647		\$957		\$957
Nahant	\$317,303	\$79,246	\$377,310	\$76,978	\$416,588	\$95,574	\$437,629	\$128,689	\$356,153	\$128,689
Nantucket	\$1,175,504	\$13,945	\$1,346,137	\$13,546	\$1,464,949	\$17,639	\$1,458,845	\$27,298	\$1,461,749	\$27,298
Natick	\$4,882,011	\$565,323	\$5,195,198	\$549,148	\$5,702,287	\$693,239	\$6,123,686	\$981,079	\$6,075,047	\$981,079
Needham	\$2,304,657	\$405,083	\$2,445,245	\$393,493	\$2,448,606	\$492,108	\$2,622,898	\$676,690	\$2,770,166	\$676,690
New Ashford	\$10,800	\$1,510	\$25,800	\$1,469	\$13,500	\$1,835	\$10,500	\$2,505	\$4,800	\$2,505
New Bedford	\$20,909,919	\$5,669,048	\$24,855,187	\$5,506,840	\$27,618,267	\$7,079,660	\$30,580,296	\$10,514,159	\$31,367,411	\$10,514,159
New Braintree		\$23,435		\$22,765		\$28,250		\$38,113		\$38,113
New Marlbor	\$41,967	\$13,161	\$29,193	\$12,784	\$67,277	\$16,369	\$70,764	\$24,427	\$73,745	\$24,427
New Salem	\$21,967	\$20,153	\$72,553	\$19,557	\$90,355	\$25,756	\$117,142	\$42,031	\$108,087	\$42,031
Newbury	\$795,819	\$82,538	\$885,657	\$80,176	\$939,688	\$105,146	\$940,466	\$166,540	\$908,513	\$166,540
Newburyport	\$2,428,714	\$408,822	\$2,521,608	\$397,125	\$2,551,961	\$496,653	\$2,800,645	\$685,785	\$2,934,465	\$685,785
Newton	\$9,054,551	\$1,305,339	\$9,721,796	\$1,267,989	\$10,180,335	\$1,590,223	\$11,334,425	\$2,205,846	\$11,098,566	\$2,205,846
Norfolk	\$602,134	\$156,339	\$634,036	\$151,865	\$699,477	\$196,702	\$807,276	\$302,761	\$756,245	\$302,761
N. Adams	\$2,812,112	\$1,075,588	\$3,281,038	\$1,044,812	\$3,800,373	\$1,349,366	\$4,657,394	\$2,025,311	\$4,495,982	\$2,025,311
N. Andover	\$2,718,320	\$365,817	\$3,434,901	\$355,350	\$3,074,963	\$455,740	\$3,310,096	\$678,891	\$3,312,228	\$678,891
N. Attleboro	\$3,396,880	\$624,854	\$4,080,772	\$606,976	\$4,827,636	\$773,579	\$4,652,014	\$1,142,219	\$4,575,157	\$1,142,219
N. Brookfield	\$636,876	\$193,186	\$788,335	\$187,658	\$835,184	\$235,718	\$694,941	\$329,931	\$676,958	\$329,931
N. Reading	\$1,760,725	\$268,365	\$1,815,671	\$260,686	\$1,924,610	\$325,728	\$2,341,754	\$447,486	\$2,177,571	\$447,486
Northampton	\$4,212,722	\$1,060,003	\$4,754,498	\$1,029,673	\$5,285,618	\$1,296,837	\$6,262,360	\$1,812,994	\$6,413,772	\$1,812,994
Northboro	\$2,840,239	\$232,830	\$3,693,954	\$226,168	\$4,435,335	\$285,644	\$1,734,213	\$408,815	\$1,542,740	\$408,815
Northbridge	\$1,796,128	\$529,032	\$1,761,328	\$513,895	\$2,046,872	\$657,178	\$2,303,523	\$967,224	\$2,473,852	\$967,224
Northfield	\$632,644	\$47,602	\$746,578	\$46,240	\$824,166	\$60,370	\$863,858	\$94,204	\$676,326	\$94,204
Norton	\$1,671,772	\$477,674	\$1,750,329	\$464,006	\$1,985,897	\$591,204	\$2,507,323	\$866,087	\$2,643,432	\$866,087
Norwell	\$1,079,661	\$175,725	\$1,173,345	\$170,697	\$1,178,079	\$213,583	\$1,266,610	\$294,523	\$1,470,197	\$294,523
Norwood	\$5,767,305	\$650,813	\$6,546,832	\$632,191	\$7,359,622	\$795,091	\$8,198,580	\$1,107,840	\$8,203,153	\$1,107,840
Oak Bluffs	\$1,111,397	\$12,691	\$1,149,557	\$12,328	\$1,265,497	\$15,737	\$1,381,201	\$23,255	\$1,219,299	\$23,255
Oakham		\$26,288	\$2,400	\$25,536	\$129,612	\$33,056	\$191,331	\$51,969	\$181,049	\$51,969
Orange	\$763,825	\$368,277	\$960,257	\$357,739	\$1,203,451	\$460,053	\$1,437,096	\$690,742	\$1,388,198	\$690,742
Orleans	\$1,100,530	\$36,228	\$1,199,537	\$35,191		\$45,376	\$1,464,669	\$68,905	\$1,494,624	\$68,905
Otis	\$190,198	\$6,574	\$175,304	\$6,386	\$178,358	\$8,122	\$252,498	\$11,770	\$252,380	\$11,770
Oxford	\$1,912,589	\$505,173	\$2,644,775	\$490,718	\$2,897,843	\$620,895	\$3,088,003	\$890,475	\$3,181,453	\$890,475

Palmer	\$3,198,250	\$433,615	\$3,372,454	\$421,208	\$3,738,378	\$542,953	\$4,392,511	\$815,002	\$4,509,348	\$815,002
Paxton	\$347,433	\$94,914	\$354,703	\$92,198	\$346,327	\$118,231	\$310,071	\$176,040	\$269,997	\$176,040
Peabody	\$8,505,207	\$1,238,153	\$9,745,018	\$1,202,725	\$10,629,603	\$1,506,241	\$11,684,913	\$2,082,408	\$11,510,817	\$2,082,408
Pelham	\$101,084	\$24,387	\$101,258	\$23,689	\$137,704	\$32,118	\$185,994	\$55,168	\$215,930	\$55,168
Pembroke	\$2,572,187	\$380,328	\$2,930,470	\$369,446	\$3,149,212	\$468,718	\$3,551,162	\$678,931	\$3,678,370	\$678,931
Pepperell	\$1,855,025	\$250,641	\$1,953,062	\$243,469	\$1,852,447	\$310,168	\$2,135,525	\$460,437	\$2,056,254	\$460,437
Peru		\$17,963		\$17,449		\$23,314		\$38,875		\$38,875
Petersham	\$45,457	\$23,679	\$63,025	\$23,001	\$105,789	\$29,132	\$134,552	\$41,631	\$79,188	\$41,631
Phillipston	\$72,771	\$24,044	\$92,277	\$23,356	\$103,217	\$29,287	\$153,397	\$41,263	\$177,219	\$41,263
Pittsfield	\$8,155,343	\$2,057,967	\$9,467,424	\$1,999,083	\$10,530,229	\$2,513,151	\$12,619,566	\$3,502,576	\$12,280,092	\$3,502,576
Plainfield		\$7,724		\$7,503		\$9,678	\$11,100	\$14,739	\$20,950	\$14,739
Plainville	\$1,410,414	\$153,420	\$1,580,517	\$149,030	\$1,623,486	\$189,871	\$1,941,589	\$274,937	\$1,907,160	\$274,937
Plymouth	\$5,317,955	\$604,356	\$6,236,379	\$587,949	\$6,918,372	\$751,349	\$8,116,660	\$1,112,046	\$8,499,612	\$1,112,046
Plympton	\$234,737	\$46,297	\$242,951	\$44,972	\$246,993	\$57,629	\$257,509	\$86,098	\$261,844	\$86,098
Princeton	\$54,831	\$55,211	\$63,358	\$53,693	\$117,195	\$70,264	\$166,043	\$112,250	\$161,647	\$112,250
Provincetown	\$1,404,726	\$36,619	\$1,697,962	\$35,571		\$44,623	\$2,048,112	\$61,774	\$2,121,009	\$61,774
Quincy	\$20,883,508	\$2,574,696	\$23,209,588	\$2,503,115	\$25,955,290	\$3,121,877	\$28,903,309	\$4,251,012	\$31,550,870	\$4,251,012
Randolph	\$7,675,180	\$817,221	\$8,321,419	\$793,837	\$9,095,453	\$998,944	\$9,328,675	\$1,402,195	\$9,661,914	\$1,402,195
Raynham	\$2,589,848	\$288,475	\$3,324,840	\$280,221	\$4,212,939	\$352,988	\$4,943,639	\$499,749	\$5,164,893	\$499,749
Reading	\$2,956,436	\$518,630	\$3,076,446	\$503,791	\$3,194,435	\$632,016	\$3,463,224	\$877,680	\$3,876,216	\$877,680
Rehoboth	\$977,777	\$192,336	\$1,304,187	\$186,832	\$1,322,139	\$242,565	\$1,464,629	\$377,858	\$1,505,949	\$377,858
Revere	\$9,343,548	\$1,292,143	\$10,065,141	\$1,255,171	\$11,304,310	\$1,594,968	\$12,525,772	\$2,303,071	\$13,767,385	\$2,303,071
Richmond		\$27,245		\$26,466		\$34,035	\$2,100	\$50,721	\$6,774	\$50,721
Rochester	\$226,130	\$82,733	\$313,570	\$80,366	\$382,720	\$104,799	\$420,306	\$166,805	\$496,530	\$166,805
Rockland	\$2,745,063	\$627,037	\$3,324,422	\$609,096	\$3,769,260	\$761,363	\$4,068,394	\$1,044,320	\$4,092,569	\$1,044,320
Rockport	\$686,846	\$85,517	\$867,275	\$83,071	\$851,218	\$106,106	\$838,443	\$155,588	\$926,109	\$155,588
Rowe		\$409		\$397		\$529		\$893		\$893
Rowley	\$437,102	\$94,718	\$620,210	\$92,102	\$683,189	\$155,482	\$727,262	\$160,984		\$160,984
Royalston	\$61,527	\$24,240	\$63,375	\$23,571	\$54,935	\$31,419	\$63,271	\$52,013	\$57,083	\$52,013
Russell	\$69,779	\$41,205	\$63,190	\$40,026	\$55,706	\$52,541	\$61,279	\$83,857	\$55,648	\$83,857
Rutland	\$309,294	\$181,401	\$405,606	\$176,211	\$572,063	\$223,866	\$716,886	\$324,547	\$836,758	\$324,547
Salem	\$8,193,693	\$820,708	\$8,692,896	\$797,225	\$9,258,004	\$1,024,740	\$10,225,809	\$1,520,987	\$10,608,312	\$1,520,987
Salisbury	\$12,688,903	\$133,870	\$12,335,608	\$130,040	\$12,383,357	\$168,209	\$13,268,395	\$259,065	\$10,784,835	\$259,065
Sandisfield	\$336,021	\$7,457	\$321,761	\$7,244	\$372,812	\$9,317	\$415,127	\$14,069	\$340,625	\$14,069

CITY/ TOWN	Wagered FY86	Distributed FY86	Wagered FY87	Distributed FY87	Wagered FY88	Distributed FY88	Wagered FY89	Distributed FY89	Wagered FY90	Distributed FY90
Sandwich	\$1,593,907	\$75,535	\$1,902,491	\$73,373	\$98,546	\$2,196,169	\$170,992	\$2,254,694	\$170,992	\$880,743
Saugus	\$5,629,663	\$484,271	\$5,913,866	\$471,023	\$6,190,125	\$6,807,580	\$880,743	\$7,523,541	\$880,743	\$44,034
Savoy		\$20,907		\$20,309						
Scituate	\$2,152,440	\$370,094	\$2,507,991	\$359,505	\$2,521,863	\$455,164	\$2,892,081	\$647,101	\$2,880,736	\$647,101
Seekonk	\$14,422,783	\$300,202	\$15,518,764	\$291,612	\$15,716,722	\$371,017	\$15,848,889	\$539,895	\$15,305,114	\$539,895
Sharon	\$1,132,759	\$297,583	\$1,190,154	\$289,068	\$1,182,234	\$368,747	\$1,207,795	\$541,018	\$1,172,522	\$541,018
Sheffield	\$515,987	\$51,729	\$480,457	\$50,318	\$491,333	\$63,986	\$490,440	\$91,827	\$471,707	\$91,827
Shelburne	\$205,104	\$67,991	\$266,338	\$66,046	\$342,145	\$83,849	\$467,269	\$120,965	\$483,988	\$120,965
Sherborn	\$106,206	\$54,881	\$111,582	\$53,311	\$128,529	\$67,062	\$172,985	\$94,014	\$156,281	\$94,014
Shirley	\$1,117,898	\$203,671	\$1,223,906	\$197,969	\$1,277,333	\$252,184	\$1,334,080	\$367,500	\$1,182,627	\$367,500
Shrewsbury	\$4,703,792	\$554,221	\$4,575,992	\$538,363	\$4,814,238	\$678,027	\$5,150,836	\$952,713	\$5,093,828	\$952,713
Shutesbury		\$22,819		\$22,166		\$28,808		\$44,833		\$44,833
Somerset	\$3,634,798	\$287,940	\$3,894,750	\$279,701	\$4,252,370	\$362,737	\$4,444,401	\$553,352	\$4,730,277	\$553,352
Somerville	\$16,538,402	\$3,279,654	\$18,040,472	\$3,185,814	\$19,260,592	\$3,962,171	\$21,251,669	\$5,318,855	\$23,151,413	\$5,318,855
S. Hadley	\$2,111,601	\$585,652	\$2,185,261	\$568,895	\$2,405,886	\$726,319	\$2,883,588	\$1,060,083	\$2,827,472	\$1,060,083
Southampton	\$698,162	\$127,477	\$738,384	\$123,829	\$822,316	\$158,709	\$948,941	\$235,420	\$961,832	\$235,420
Southboro	\$939,706	\$102,331	\$1,103,335	\$99,403	\$1,140,291	\$124,894	\$1,348,062	\$174,311	\$1,174,885	\$174,311
Southbridge	\$3,719,843	\$756,735	\$4,097,141	\$735,494	\$4,346,486	\$943,743	\$4,541,049	\$1,396,054	\$4,306,536	\$1,396,054
Southwick	\$2,250,259	\$255,948	\$1,947,600	\$248,625	\$2,167,909	\$320,928	\$2,542,339	\$487,027	\$2,328,194	\$487,027
Spencer	\$2,055,169	\$499,898	\$2,309,363	\$485,595	\$2,614,078	\$613,709	\$2,923,937	\$875,031	\$3,194,004	\$875,031
Springfield	\$31,585,541	\$7,044,178	\$34,363,444	\$6,842,624	\$38,275,788	\$8,698,967	\$45,026,680	\$12,539,637	\$46,337,782	\$12,539,637
Sterling	\$463,095	\$134,627	\$537,262	\$130,775	\$563,283	\$168,237	\$657,960	\$258,084	\$672,335	\$258,084
Stockbridge	\$205,869	\$29,012	\$274,987	\$28,182	\$271,866	\$35,298	\$300,640	\$48,864	\$279,335	\$48,864
Stoneham	\$4,445,341	\$511,160	\$5,259,317	\$496,535	\$5,760,822	\$623,276	\$5,504,535	\$867,917	\$5,172,838	\$867,917
Stoughton	\$6,079,598	\$802,022	\$6,346,226	\$779,074	\$6,871,966	\$983,220	\$8,115,541	\$1,390,451	\$8,043,325	\$1,390,451
Stow	\$452,167	\$87,741	\$517,732	\$85,230	\$611,143	\$108,268	\$696,865	\$156,585	\$591,971	\$156,585
Sturbridge	\$1,634,410	\$126,050	\$1,703,508	\$122,443	\$1,875,917	\$158,358	\$2,320,108	\$245,802	\$1,836,211	\$245,802
Sudbury	\$767,860	\$225,726	\$815,587	\$219,267	\$884,411	\$276,211	\$1,010,667	\$389,119	\$971,286	\$389,119
Sunderland	\$345,710	\$105,346	\$411,837	\$102,332	\$350,925	\$128,468	\$527,843	\$179,324	\$600,456	\$179,324
Sutton	\$589,655	\$170,162	\$694,692	\$165,293	\$827,324	\$211,472	\$1,100,040	\$313,212	\$1,127,568	\$313,212
Swampscott	\$1,070,389	\$237,069	\$1,223,263	\$230,286	\$1,289,017	\$288,093	\$1,384,361	\$395,851	\$1,092,977	\$395,851

Swansea	\$3,964,670	\$498,391	\$4,511,984	\$484,130	\$4,892,500	\$613,144	\$5,460,731	\$879,256	\$5,568,725	\$879,256
Taunton	\$7,974,635	\$2,227,332	\$9,246,565	\$2,163,601	\$10,329,894	\$2,754,461	\$11,859,643	\$3,998,252	\$11,727,926	\$3,998,252
Templeton	\$776,453	\$267,926	\$949,536	\$260,260	\$1,149,318	\$334,892	\$1,381,458	\$501,552	\$1,238,532	\$501,552
Tewksbury	\$5,516,290	\$677,812	\$5,866,383	\$658,418	\$6,131,941	\$831,701	\$7,161,664	\$1,188,909	\$7,623,387	\$1,188,909
Tisbury	\$414,488	\$22,780	\$519,077	\$22,129	\$614,403	\$28,464	\$655,782	\$43,220	\$618,125	\$43,220
Tolland		\$1,211		\$1,176		\$1,470		\$2,063		\$2,063
Topsfield	\$302,097	\$90,566	\$209,070	\$87,975	\$305,506	\$113,349	\$178,328	\$168,877	\$254,973	\$168,877
Townsend	\$1,802,031	\$216,408	\$1,851,552	\$210,216	\$1,973,085	\$270,906	\$2,121,643	\$411,857	\$1,877,426	\$411,857
Truro	\$172,109	\$7,092	\$198,960	\$6,889		\$8,702	\$234,278	\$12,195	\$214,225	\$12,195
Tyngsboro	\$6,415,057	\$134,150	\$7,391,985	\$130,311	\$7,857,430	\$170,517	\$8,577,124	\$271,185	\$7,025,627	\$271,185
Tyringham		\$3,353		\$3,257		\$4,212		\$6,431		\$6,431
Upton	\$430,755	\$113,824	\$443,882	\$110,567	\$502,243	\$142,840	\$544,486	\$216,799	\$530,240	\$216,799
Uxbridge	\$1,995,216	\$305,860	\$2,293,867	\$297,108	\$2,544,959	\$377,569	\$2,662,465	\$548,534	\$2,738,838	\$548,534
Wakefield	\$4,184,370	\$575,019	\$4,652,907	\$558,566	\$4,646,438	\$704,970	\$4,772,138	\$997,211	\$4,542,043	\$997,211
Wales	\$150,661	\$41,375	\$182,845	\$40,192	\$226,396	\$53,128	\$352,127	\$87,155	\$256,547	\$87,155
Walpole	\$3,485,778	\$438,471	\$3,801,781	\$425,925	\$4,116,760	\$537,280	\$4,529,078	\$761,615	\$4,367,545	\$761,615
Walham	\$12,419,844	\$1,345,765	\$13,743,764	\$1,307,259	\$14,604,345	\$1,646,866	\$16,507,725	\$2,311,369	\$16,943,773	\$2,311,369
Ware	\$1,972,634	\$358,594	\$2,007,522	\$348,333	\$2,178,963	\$451,593	\$2,694,239	\$691,120	\$3,027,301	\$691,120
Wareham	\$4,597,145	\$500,335	\$5,531,044	\$486,019	\$6,305,293	\$617,778	\$7,412,639	\$901,832	\$7,157,343	\$901,832
Warren	\$711,005	\$151,856	\$835,512	\$147,602	\$982,979	\$189,880	\$1,162,420	\$283,881	\$1,152,475	\$283,881
Warwick		\$16,179		\$15,716		\$19,803		\$27,880		\$27,880
Washington		\$15,600		\$15,153		\$19,296		\$28,586		\$28,586
Watertown	\$8,628,373	\$774,119	\$9,279,901	\$751,969	\$9,658,620	\$938,877	\$10,549,564	\$1,281,761	\$10,489,645	\$1,281,761
Wayland	\$1,155,855	\$178,545	\$1,171,684	\$173,437	\$1,361,102	\$218,021	\$1,460,439	\$304,508	\$1,542,653	\$304,508
Webster	\$5,243,462	\$535,129	\$5,798,497	\$519,817	\$6,388,724	\$656,446	\$7,094,717	\$933,160	\$7,207,256	\$933,160
Wellesley	\$1,327,456	\$352,218	\$1,216,875	\$342,140	\$1,193,124	\$429,603	\$1,443,903	\$597,884	\$1,514,693	\$597,884
Wellfleet	\$234,795	\$13,848	\$275,924	\$13,506		\$17,036	\$471,232	\$24,159	\$457,079	\$24,159
Wendell		\$21,580		\$20,962		\$27,673		\$44,298		\$44,298
Wenham	\$157,569	\$68,349	\$165,150	\$66,393	\$153,351	\$83,449	\$139,484	\$116,596	\$131,146	\$116,596
W. Boylston	\$1,475,398	\$165,659	\$1,664,022	\$160,919	\$1,963,342	\$201,243	\$2,121,933	\$276,683	\$2,158,801	\$276,683
W. Bridgewater	\$1,618,027	\$171,735	\$2,097,280	\$166,822	\$2,492,964	\$210,984	\$2,823,249	\$300,484	\$2,706,875	\$300,484
W. Brookfield	\$458,340	\$91,477	\$576,676	\$88,860	\$709,385	\$114,810	\$912,550	\$175,658	\$984,217	\$175,658
W. Newbury	\$141,829	\$60,709	\$152,532	\$58,972	\$145,341	\$75,718	\$170,144	\$114,293	\$159,321	\$114,293
W. Springfield	\$6,829,516	\$787,968	\$8,009,532	\$765,422	\$9,141,982	\$967,256	\$10,777,669	\$1,370,837	\$10,085,735	\$1,370,837

CITY/ TOWN	Wagered FY86	Distributed FY86	Wagered FY87	Distributed FY87	Wagered FY88	Distributed FY88	Wagered FY89	Distributed FY89	Wagered FY90	Distributed FY90
W. Stockbrid	\$304,803	\$26,024	\$353,996	\$25,280	\$351,988	\$32,373	\$367,615	\$47,877	\$330,599	\$47,877
W. Tisbury	\$14,794	\$4,333	\$38,770	\$4,209	\$9,946	\$5,450	\$49,677	\$8,380	\$90,802	\$8,380
Westboro	\$2,331,307	\$267,901	\$2,348,315	\$260,235	\$2,390,690	\$317,992	\$2,426,504	\$406,221	\$2,503,789	\$406,221
Westfield	\$6,753,538	\$1,405,923	\$8,502,596	\$1,365,696	\$9,061,930	\$1,727,861	\$10,073,243	\$2,470,310	\$9,803,823	\$2,470,310
Westford	\$1,684,632	\$306,545	\$1,992,084	\$297,774	\$1,997,439	\$371,684	\$2,114,013	\$512,414	\$2,001,384	\$512,414
Westhampton	\$2,700	\$25,570	\$23,700	\$24,838	\$49,189	\$32,432	\$7,500	\$50,977	\$48,205	\$50,977
Westminster	\$555,895	\$111,004	\$603,897	\$107,827	\$640,944	\$139,417	\$747,022	\$211,937	\$704,229	\$211,937
Weston	\$173,177	\$108,295	\$251,592	\$105,197	\$297,801	\$132,551	\$319,676	\$185,807	\$302,418	\$185,807
Westport	\$2,444,682	\$344,793	\$2,711,228	\$334,928	\$2,867,465	\$426,715	\$2,978,978	\$621,010	\$2,921,395	\$621,010
Westwood	\$1,079,586	\$180,754	\$1,123,328	\$175,582	\$1,109,712	\$220,289	\$1,264,812	\$304,381	\$1,094,987	\$304,381
Weymouth	\$11,058,129	\$1,874,168	\$12,361,967	\$1,820,542	\$13,555,281	\$2,280,629	\$15,335,635	\$3,156,067	\$16,157,003	\$3,156,067
Whaley	\$163,014	\$29,443	\$278,722	\$28,601	\$414,780	\$36,920	\$551,762	\$55,384	\$653,011	\$55,384
Whitman	\$2,414,669	\$321,808	\$2,671,255	\$506,878	\$2,905,838	\$643,287	\$3,276,827	\$919,784	\$3,339,501	\$919,784
Wilbraham	\$928,935	\$277,173	\$1,008,080	\$269,242	\$1,251,502	\$346,682	\$1,793,637	\$520,810	\$1,733,353	\$520,810
Williamsburg	\$731,029	\$66,603	\$841,948	\$64,697	\$346,253	\$84,696		\$132,831		\$132,831
Williamstown		\$258,695		\$251,293	\$613,389	\$319,093	\$1,078,215	\$456,031	\$1,092,491	\$456,031
Wilmington	\$2,931,273	\$316,180	\$3,126,538	\$307,133	\$3,469,451	\$385,739	\$3,931,615	\$538,098	\$4,076,244	\$538,098
Winchendon	\$2,776,472	\$320,147	\$2,783,437	\$310,987	\$2,815,857	\$398,337	\$2,992,183	\$594,241	\$2,626,115	\$594,241
Winchester	\$1,623,692	\$335,752	\$1,673,868	\$326,145	\$1,963,543	\$408,433	\$4,055,963	\$564,804	\$3,578,993	\$564,804
Windsor		\$11,430		\$11,103		\$14,119		\$20,611		\$20,611
Winthrop	\$2,726,489	\$697,856	\$3,108,386	\$677,888	\$3,483,121	\$841,093	\$3,680,885	\$1,126,929	\$3,843,441	\$1,126,929
Woburn	\$8,622,898	\$779,043	\$9,609,701	\$756,753	\$10,580,136	\$951,620	\$11,482,759	\$1,331,872	\$11,987,961	\$1,331,872
Worcester	\$39,204,996	\$7,022,631	\$44,177,278	\$6,821,693	\$48,380,177	\$8,569,161	\$59,216,187	\$11,919,630	\$61,903,835	\$11,919,630
Worthington		\$17,341		\$16,845		\$23,007		\$40,680		\$40,680
Wrentham	\$831,222	\$220,487	\$999,479	\$214,178	\$1,133,864	\$271,317	\$1,319,117	\$391,345	\$1,143,412	\$391,345
Yarmouth	\$3,932,436	\$218,685	\$4,352,874	\$212,428		\$271,826	\$5,487,167	\$400,034	\$5,751,648	\$400,034

NOTE: Blank spaces indicate that information was unavailable.

SOURCE: Massachusetts State Lottery; Massachusetts Department of Revenue.

APPENDIX B
MSL EXPENSES
(in 000's)

	<u>Advertising</u>	<u>Printing/ Office Suppl</u>	<u>Salaries</u>	<u>Agent Bonus</u>	<u>Agent Commission</u>	<u>Total Expenses</u>	<u>Annual Growth</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>		
1972	\$916 27%	\$151 5%	\$584 18%	\$86 3%	\$1,099 33%	\$3,334	
1973	\$1,567 18%	\$654 8%	\$1,603 18%	\$398 5%	\$3,536 41%	\$8,731	162%
1974	\$1,858 18%	\$966 10%	\$1,960 19%	\$609 6%	\$4,231 42%	\$10,092	16%
1975	\$2,397 20%	\$1,443 12%	\$2,459 20%	\$837 7%	\$3,985 33%	\$12,108	20%
1976	\$2,405 15%	\$2,339 15%	\$2,997 19%	\$862 5%	\$5,084 32%	\$15,745	30%
1977	\$3,300 15%	\$2,868 13%	\$4,268 20%	\$1,061 5%	\$7,128 33%	\$21,572	37%
1978	\$3,575 16%	\$2,459 11%	\$4,851 21%	\$1,123 5%	\$7,604 33%	\$22,864	6%
1979	\$3,520 16%	\$2,480 11%	\$5,166 23%	\$1,006 4%	\$7,676 34%	\$22,685	-1%
1980	\$3,394 13%	\$3,791 15%	\$5,446 22%	\$1,269 5%	\$8,758 35%	\$25,277	11%
1981	\$4,257 15%	\$3,655 13%	\$6,273 22%	\$1,163 4%	\$10,035 36%	\$28,120	11%
1982	\$6,019 17%	\$3,091 9%	\$7,091 20%	\$1,538 4%	\$12,618 36%	\$34,923	24%
1983	\$5,637 14%	\$2,929 7%	\$8,037 20%	\$1,788 4%	\$14,534 36%	\$40,495	16%
1984	\$6,222 14%	\$3,691 8%	\$8,530 19%	\$2,279 5%	\$17,739 39%	\$45,558	13%
1985	\$11,838 13%	\$6,075 7%	\$9,561 11%	\$5,808 7%	\$42,792 48%	\$88,505	94%
1986	\$10,485 10%	\$8,030 7%	\$11,457 10%	\$7,291 7%	\$54,457 50%	\$108,172	22%
1987	\$10,268 8%	\$11,557 9%	\$13,208 11%	\$8,769 7%	\$60,217 48%	\$124,798	15%
1988	\$13,872 11%	\$12,392 9%	\$15,844 12%	\$9,441 7%	\$66,141 50%	\$131,004	5%
1989	\$12,122 8%	\$12,806 9%	\$16,509 11%	\$11,554 8%	\$72,757 49%	\$149,613	14%
1990	\$12,648 9%	\$14,538 10%	\$16,580 11%	\$11,544 8%	\$78,445 53%	\$147,632	-1%
1991*	\$7,042 6%	\$10,969 10%	\$13,962 12%	\$9,550 8%	\$66,076 57%	\$114,998	*

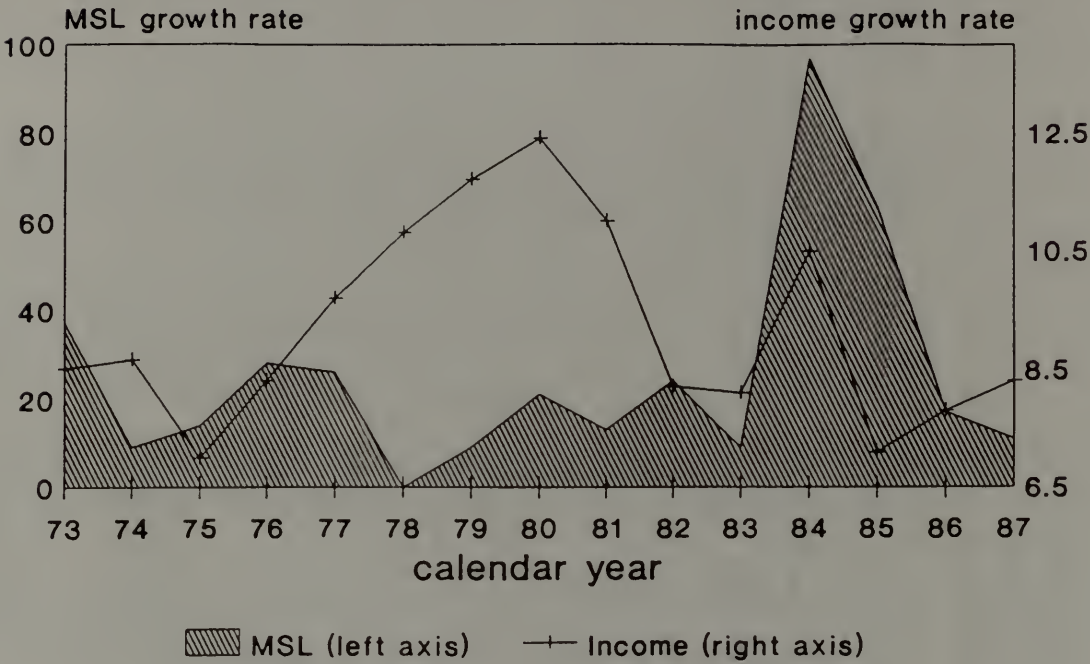
NOTE: *Partial year.

Annual Growth represents the percent change in total expenses from the prior fiscal year.
The "% " columns represent the expense as a percentage of total operating expenses.

SOURCE Massachusetts State Lottery

APPENDIX C

MSL Growth vs. Personal Income Growth



Source: Massachusetts State Lottery
U.S. Dept. of Commerce
Bureau of Labor Statistics

**OTHER REPORTS IN THE 1991-1992 LEGISLATIVE YEAR BY
THE SENATE POST AUDIT AND OVERSIGHT BUREAU**

- February 1991 EARLY RETIREMENT: DESIGNING AND IM-
 IMPLEMENTING AN INCENTIVE PROGRAM IN
 MASSACHUSETTS (S. 1361)
- April 1991 AN ANALYSIS OF THE MASSACHUSETTS
 EXECUTIVE BRANCH WORKFORCE (S. 1490)
- June 1991 CONTROLLING STATE EMPLOYEE HEALTH
 CARE COSTS (S. 1610)

